ORGANIZATIONAL COMMUNICATION AND FACULTY SATISFACTION IN INSTITUTIONS OF HIGHER EDUCATION

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PREFACE

This study was conducted to increase the understanding of organizational communication at institutions of higher education. The objective of this study was to identify the aspects and frequency of the various organizational communication messages utilized between the office of the dean and the faculty of senior institutions of higher education. An attempt was made to ascertain the relationship between the level of satisfaction with communication experienced by college faculty members and each aspect and frequency of communication utilized.

The writer is indebted to many persons who gave aid and encouragement in the completion of this study. Very special appreciation is extended to Dr. Rolland A. Bowers, director of the dissertation, for his guidance and encouragement throughout this study. No adviser could have accomplished these ends in a more desirable or professional manner. Our relationship established during this research and the preparation leading up to it will long be cherished by the author. Appreciation is also expressed to the other committee members, Dr. Carl Anderson, Dr. Ralph Brann, Dr. David Perrin, and Dr. Richard Teague, for their assistance.

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CHAPTER I

INTRODUCTION

It is well established that the efficient functioning of educational organizations requires an effective communication system. Without the capacity to disseminate and obtain information, the very survival of an organization is threatened. So essential is the communication network in organizations that several theorists have written extensively in this area. Chester Barnard, who might be regarded as the father of the behavioral science school of organizational theory, was one of the first theorists to mention the importance of communication in his writings.[1] He stated, "In an exhaustive theory of organization, communication would occupy a central place because the structure, extensiveness and scope of the organization are also entirely determined by communication techniques."

Alex Bavelas and Dermott Barrett theorized that the effectiveness of an organization with respect to the achievement of its goals is closely related to an effective communication network within the organization.[2] They further reasoned that the concept of communication is a primary aspect of the organization, and all basic functions of the organization hinge upon this network.

Harold Guetzkow stated that the communication network of an organization links its individuals and its groups in a variety of ways.[3] He further mentioned that the communication system serves as the vehicle

by which organizations are embedded in their environments and that the inputs and outputs of organizations are mediated through communications.

Statement of the Problem

An extensive explanation of organization communication was delivered in a speech by Goldhaber at the International Symposium in Communication during 1975.[4] He noted three common strands present in practically all institutions.

1. Organizational communication occurs within a complex open system which is influenced by and influences its environment.
2. Organizational communication involves messages, their flow, purpose, direction, and media.
3. Organizational communication involves people, their attitudes, feelings, relationships, and skills.

Like other social organizations, communication permeates every process of college life. Professors instruct using oral, written, and other forms of communication. Students demonstrate their learning and creativity through similar media. College administrators base their effectiveness on the communication system. Barnard observed that establishing and maintaining communication was a continuous task of an administrator.[5]

Thus, although the significance of the communication system was widely recognized as early as 1938, considerable work remained to be done toward specifying the dimensions through which communication could be studied and mutual relations among those dimensions established. Particularly, the assumed effects of certain phrases of communication in an organization on the mental and behavioral aspects of an individual

rarely had been studied.

Purpose of the Study

It was the purpose of the researcher to identify the aspects and frequencies of the various organizational communication utilized between the office of the dean and the faculty in senior institutions of higher education and to ascertain the relationship between the level of satisfaction with communication experienced by college faculty members and each aspect and frequency of communication utilized.

It was hoped that this study would provide information to deans and other college administrators on the most prevalent kinds of organizational communication (functional aspects) and the framework of that communication (structural aspects) that exist within colleges. Such information would provide insight on what kinds of communication and communication structure should deans and other administrators employ with their faculty to be more effective.

Need for the Study

Research on job satisfaction and its correlates has been restricted almost exclusively to employees in non-educational organizations. No studies could be found through which the relationship of measurable properties of organizational communication to faculty satisfaction in institutions of higher education were identified.

Conflicts in communication between college deans and faculty resulting in lack of faculty bargaining power and no confidence votes in the office of the dean has been cited in a recent issue of The Chronicle of Higher Education.[6] If college deans and other college

administrators could gain information on the relationship of organizational communication and faculty satisfaction, an approach to correcting some of the poor communication problems within institutions of higher education might be resolved.

Definitions

Seven terms with connotations peculiar to this study were utilized. The definitions, devised to facilitate this study, were as follows:

Communication. The term, communication, was defined as a process of giving and receiving facts, ideas, or feelings.[7] Facts were conceived as statements which could be verified. Ideas included requests, suggestions, directives, and opinions concerning persons, objects, or issues. Feelings were related to states of inner being and were reflected in expressions of like or dislike, satisfaction or dissatisfaction.

Communication Process. The term, communication process, was the medium through which items of communication were transmitted and received among members of a given organization. Underlying this process were very important psychological concomitants such as individual and group motives, values, expectations, and past experiences. Internal communication was used to refer to the exchange of information, ideas, and feelings among members within an organization. External communication was used to refer to the exchange of information, ideas, and feelings between a member or members of an organization and some person or group outside the organization.

Formal Communication Channels. The terms, formal communication

channels, were those channels that were officially established, and traversed the organization through the hierarchy of authority. Formal relationships are those shown on an organizational chart and are established for the purpose of determining, maintaining, or achieving organizational goals.

Informal Communication Channels. The terms, informal communication channels, were those channels that were not formal. Informal behavioral relationships were not dependent on formal determination. In other words, such relationships tended to develop spontaneously without formal planning or design.

Vertical Communication Channels. The terms, vertical communication channels, were used to refer to the "upward-downward" aspects of organization communication.

Horizontal Communication Channels. The terms, horizontal or peer communication channels, were used to refer to the behavioral relationships that existed between persons who occupied the same level of organization.

Job Satisfaction. The terms, job satisfaction, were used to refer to affective orientations on the part of individuals toward work roles which they occupied. Positive attitudes toward the job were conceptualized as job satisfaction. Negative attitudes toward the job were equated with job dissatisfaction.

Procedures

Four primary questions were posited. The first two were satisfied by using the Likert Scale Program to calculate the frequency of occurrence of the communication behavior utilized by the office of the dean.[8]

The last two were answered by testing certain hypotheses using the Likert Scale Scoring Program, the Scattergram subprogram of the Statistical Package for the Social Sciences (SPSS),[9] a Two-Factor Mixed Design of Analysis of Variance,[10] and the Newman-Keuls' Multiple-Range Test.[11] The four primary questions were as follows:

Primary Question Number One. Are communication systems within institutions of higher education more formal or informal?

Primary Question Number Two. What was the extent of usage of the seven types of communication messages utilized in institutions of higher education by the office of the dean?

Primary Question Number Three. Do faculties within institutions of higher education experience greater levels of satisfaction within organizations that have communication systems characterized as formal or informal?

Primary Question Number Four. What levels of satisfaction do faculties within institutions of higher education experience with respect to the seven types of communication messages?

Limitations and Delimitations of the Study

This study is limited to faculty members of selected universities in the State of Oklahoma. The accuracy of the data is limited by the degree to which the faculty members surveyed answered frankly and truthfully. Inferences from the finding of this study are limited to the population studied and could not be applied appropriately to populations in other geographical areas without the risk of over-generalizations and false assumptions.

Organization of the Study

The literature pertaining to organizational communication and faculty or staff satisfaction is reviewed in Chapter II. In Chapter III, the description of the research methodology and design are reported; operational definitions are defined; development of the instrument is explained; hypotheses are stated; data collection and statistical procedures used in the analysis are described. The presentation and analysis of the data are dealt with in Chapter IV. In Chapter V, the study is summarized and concluding statements are presented.

FOOTNOTES

[1]Chester I. Barnard, The Function of the Executive (Massachusetts, 1938), p. 91.

[2]Alex Bavelas and Dermott Barrett, "An Experimental Approach to Organizational Communications," Personnel (March, 1951), p. 368.

[3]Harold Guetzkow, "Communications in Organizations," in James March, ed., Handbook of Organizations (Chicago, 1965), pp. 534-573.

[4]Gerald M. Goldhaber, "Organizational Communication: State of the Art, 1975," Vital Speeches of the Day (October, 1975), pp. 268-275.

[5]Barnard, p. 106.

[6]The Chronicle of Higher Education (January 16, 1978), p. 7.

[7]Robert Park, "The City: Suggestion for the Investigation of Human Behavior in the Urban Environment," in Paul Hatt and Albert Reiss, eds., Readers in Urban Sociology (Chicago, 1951), p. 20.

[8]David W. Perrin, Likert Scale Scoring Program, University of Iowa, Evaluation and Examination Service (March, 1974).

[9]Scattergram, Subprogram of the Statistical Package for the Social Sciences (SPSS), Oklahoma State University Computer Center.

[10]James L. Bruning and B. L. Kintz, Computational Handbook of Statistics (Illinois, 1977), pp. 55-61, pp. 278-280, p. 300.

[11]Ibid., pp. 119-122.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of Chapter II is to present a review of the literature related to the study. The chapter is divided into three sections. A review of the literature relating to organizational communication, its dimensions and its theoretical aspects, is presented in the first section. Selected literature related to the affect of informal and formal communication on staff satisfaction within educational and non-educational organizations is presented in the second section. A summary of Chapter II is presented in the third section.

Typologies of Organizational Communication

Dimensions of Organizational Communication

Organizational communication within any institution involves many complex processes and contains a large number of intervening variables. In order to provide the reader with a framework for organizing and categorizing these variables, the researcher used a classification scheme that approached the study of organizational communication in colleges along two dimensions: function and structure.

Katz and Kahn provided a viewpoint on the function of organizational communication.[1] They took the position that there existed a series of organizational subsystems into which communication functions

could be classified: production, maintenance, adaptation, and management. Their scheme provided a perspective of the entire organization; it was useful for administrators trying to operate and integrate all functions or for an analyst studying the whole organization.

Numerous authors had written about organizational communication and had developed their own variation of functional categories. Through the diversity of their findings, it was illustrated that there was no functional categorical system which was necessarily "best" for a given organization. Jacob, in her doctoral dissertation, reviewed twelve categorical systems of organizational theorists. She was able to group their functional categorical systems under five different headings: work, maintenance, motivation, integration, and innovation.[2]

Farace, Monge, and Russell's conceptual design of organizational communication is illustrated in Figure 1. They contended that the three functions--production, maintenance, and innovation--were central in organizational communication and all other functions could be subsumed under these three headings.[3]

Production communication was used with reference to that subset of the total message flow in the organization which was directed toward the achievement of the organization's output or production goals.[4] Production messages were those messages that were utilized to coordinate and regulate the activities of the organization's members in such a way as to bring about the desired end results. This form of communication involved work being done, work waiting to be done, problems in the work, and problem detection and correction. The flow of production messages which governed or affected ongoing work activities was assumed to follow both formal and informal communication channels.

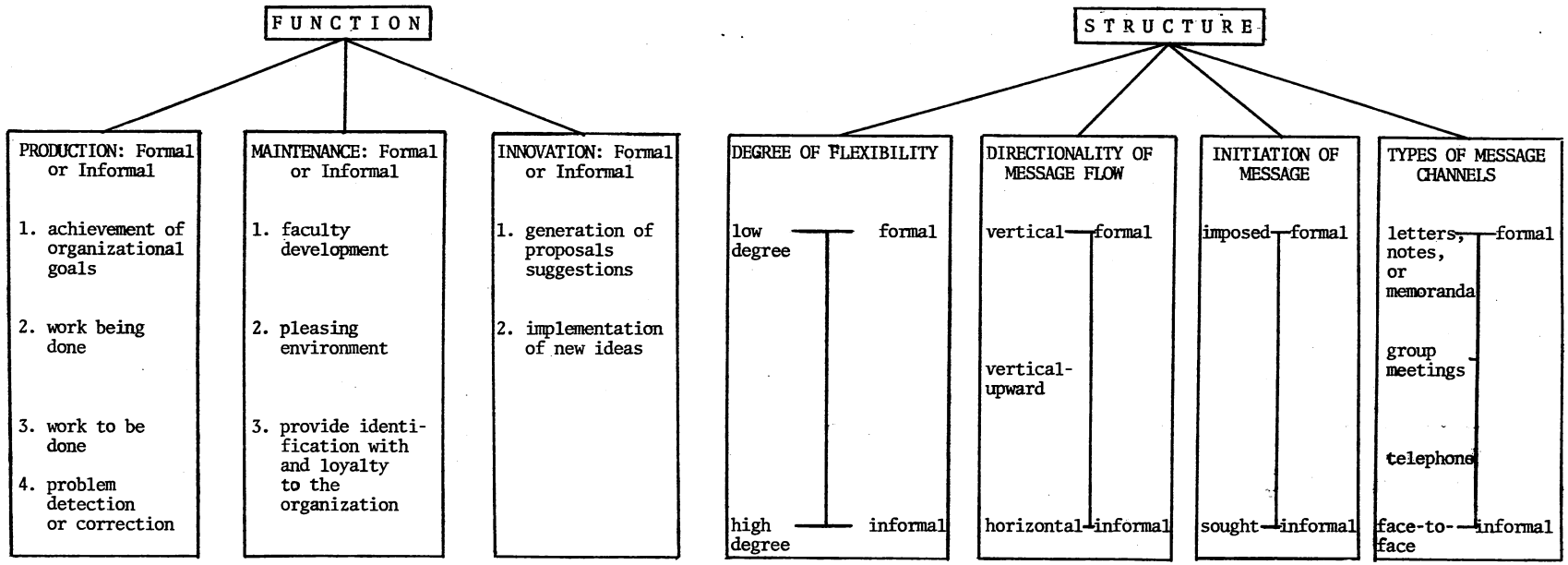

Figure 1. Conceptual Diagram of Organizational Communication[5]

Maintenance communication involved a purpose which was quite distinct from either production or innovation communication. Farace, Monge, and Russell discussed the maintenance function in terms of three subcategories.[6] The first subcategory of maintenance communication was that which improved or enhanced the individual's concept of self. The second subcategory was that which encouraged the nature or quality of interpersonal relations. These two categories were classified as part of the informal communication system. The third subcategory was that which promoted the identification with and the loyalty to the organization and was part of the formal communication system.

The innovation function of communication was described as either the generation of proposals or the implementation of new ideas for improving or changing the organization. For example, higher management might wish to increase efficiency and job satisfaction by providing a mechanism within the organization where new ideas and practices from subordinates could be obtained and evaluated.[7]

Whereas communication function reflected the effects of communication flow, communication structure was related to the patterns or regularities of the movement of the messages through the organization. Katz and Kahn wrote that function and structure are intimately linked together, and major breakdowns in either could render the communication system of an organization inoperative.[8]

Barnard discussed communication structure as overall work flow which included frequent acts of interdependence among the organization's members.[9] He took the perspective that the basic structure of communication contained repetitive, recurring patterns of message exchange.

According to Farace, Monge, and Russell, Berlo recognized three dimensions of communication structure in organizations: (1) message flow, (2) network elasticity, and (3) types of information channels.[10] The message flow of communication structure was described as all-directional. Downward message flow originated from management, upward message flow was directed to management from the staff, and lateral message flow stayed among the ranks of the staff or management.

The network of elasticity was used in reference to specific pathways messages were to take. Communicators had a large measure of freedom in their choice of communication partners or networks for sending messages. The types of information channels most commonly used were telephone or intercom, memorandum or letter distribution, group meetings, and face-to-face encounters.

Farace, Monge, and Russell discussed four categories within communication structure: (1) degree of network flexibility, (2) directionality of message flow, (3) initiation of messages, and (4) types of messages.[11] The degree of flexibility of communication structure varied in range from the highly codified formal organization with few measures of freedom for message transmission to a non-codified informal organization with many measures of freedom.

According to Farace, Monge, and Russell, the directionality or pattern of message flow determined whether the message was formal or informal. Messages directed from supervisor to subordinates were described as vertical-downward messages and were formal in nature. Messages directed from subordinates to superordinates were called vertical-upward messages and were informal in nature. Instead of authority, upward communication stressed the accountability of status

relationships. Those messages directed between subordinates or superordinates at the same hierarchical level were usually informal and were called horizontal or lateral messages.

Farace, Monge, and Russell made a distinction between the initiation of messages that were imposed and those that were sought. The imposed messages were initiated by superordinates and were irrespective of the wants or desires of subordinates. The sought messages were initiated by individuals at all hierarchical levels in an informal manner.

Message channel was the term used to identify the medium by which the message was transmitted. The first channel contained letters, notes, or memoranda. The other three were group meetings, telephone conversations, and face-to-face. Letters, notes, memoranda, and group meetings were classified as formal. The face-to-face encounters and telephone conversations were considered to be informal.

Theoretical Aspects of Organizational Communication

A review of existing organizational theories added support to the two dimensions of organizational communication identified earlier. Several theories are reviewed with respect to the functional and structural concepts discussed above.

Weber's perceptive and incisive theoretical analysis of the principles of bureaucracy in his early classic writings was undoubtedly the most important general statement of formal organizations.[12] Weber described the core of the bureaucratic type of organization as being a system of control based on rational rules. These rules regulated the

whole organizational structure and process on the basis of technical knowledge, with the goal of maximizing efficiency.

Weber stressed the impersonality of relationships and the clear differentiation between private and official lives of members of the organization. He portrayed, through what he called a bureaucratic model, a communication network in which the level of formalization was very high. The degree of flexibility with respect to lines of communication was minimal. The directionality of message flow and message initiation was from the top downward.

The function of communication in such a model was primarily, if not exclusively, directed toward production matters. Innovation was not seen as the concern of organizational members, except perhaps those at the very top. Maintenance communication was of scant importance.

The results reported by Mayo and his colleagues in the Hawthorne studies were the main inspiration for the development of the field of human relations.[13] Unlike the earlier models, the human relations model was focused on informal group interaction and was used to stress oral communication. It minimized the importance of formal rules.

In this model, there was a direct focus on horizontal communication among workers. The overall communication volume in the organization was greater than in the Weberian model, with much greater emphasis on maintenance messages and peer communication. Similarly, more initiation of communication was likely to occur at all levels in the organization.

The human relations model focused on the flow of messages among basic work groups and minimized the importance of message flow dealing with production. The model indirectly implied the need for some flexibility in the organization's communication linkage with major

emphasis on the stable relationships of individuals to their informal groups.

In Simon's Administrative-Behavior Theory of organizations, he attempted to integrate the Weberian and the human relations communication models.[14] While focusing on the individual within the organization, Simon stressed a rigid hierarchical system with clearly designated lines of communication. Simon's theory focused on informal groups but did not stress peer communication. Therefore, communication was restricted primarily to vertical hierarchical lines. Simon, like Weber, stressed production messages but placed somewhat the importance of maintenance messages.

This communication model implied some initiation of messages by subordinates, but most communication was traveling downward from top management. Thus, this model emphasized formally established communication lines while holding to a minimum the flexibility in communication contacts.

While McGregor's Theory X focused on management aspects in much the same manner as Weber's, his Theory Y emphasized the individual. The Theory Y model accented oral communication with a minimum of written messages. It did not stress peer or hierarchical communication, but rather independent effort.[15]

Most communications eminating from this model were initiated by subordinates rather than imposed by superordinates. The model pointed out equivalent stress on messages from members through the hierarchy, and thus, there was a relatively equal proportion of messages traveling in each possible direction with a high degree of flexibility in interaction patterns.

In Likert's System IV, the primary emphasis was on the group.[16] With the absence of formal rules, group decision making was stressed. The model was focused on a bias toward oral communication and was used to advocate a high level of communication, both upward, downward, and horizontally with peers. Through the model, Likert called for management to solicit information from subordinates and a minimum of barriers to the initiation of communication. He tended to stress production messages, but at the same time group situations were encouraged, and superordinates were required to be involved with their subordinates' problems.

With the involvement of all personnel in the decision-making process that affects them, this model stressed innovative messages. It showed a considerable amount of flexibility in communication patterns as a consequence of a general freedom and the involvement of all relevant members in activities that impinged on their organizational lives.

The five organizational theories reviewed above added support to two basic dimensions of organizational communication. These five theories are summarized in Table I.[17]

Staff Satisfaction

The communication network of any educational organization is structured so that information may be transmitted in either of two ways: through formally established communication lines, or through conversations, consultations, and other informal means.

TABLE I

SUMMARY OF FIVE ORGANIZATIONAL THEORIES

Communication Dimension	Weber's Bureaucratic Model	Simon's Administrative-Behavior Model	Mayo's Human Relations Model	McGregor's Theory Y Model	Likert's System IV Model
Function	production	production maintenance	production maintenance	production maintenance	production maintenance
Structure					
Flexibility	minimal	some	some	high	high
Direction	vertical down	vertical both	horizontal	all	all
Initiation	imposed	imposed	imposed	sought	sought

Relationship of Communication Formality and Communication Satisfaction

There exists a body of research through which it is suggested that there is a positive association between the frequency of use of informal communication lines and the level of satisfaction with communication. This idea became evident in the classic approaches to human relations as used in the Hawthorne studies. Mayo demonstrated the importance and existence of informal groups within an organization and further showed that the norms of these informal groups could strongly affect production.[18] Later studies by Simon,[19] Selznick,[20] and Blau and Scott[21] gave further support to the idea that the use of informal patterns is essential to staff performance and increases employee morale.

There is also some data suggesting that job satisfaction is related to the number of opportunities for interaction with others on the job. On the basis of interviews with workers in an automobile plant, Walker and Guest stated that isolated workers disliked their jobs and gave social isolation as the principal reason.[22] Kerr, Koppelmeir, and Sullivan found a significant tendency for individuals within departments providing the least opportunity for conversations among workers to have the highest rates of job dissatisfaction.[23]

Sarvatsky found that machine operators who had restricted opportunity for communication because they worked under conditions of intense noise or were confined to the area of their machine had much higher rates of job dissatisfaction than non-machine operators.[24] These findings were consistent with Richards and Dobryns' observations that the satisfaction of a group of workers in an insurance company was greatly

lowered by an environmental change which restricted their opportunity for social interaction.[25] Likert found that the relationship between satisfaction and performance became increasingly positive as the content of the job became more varied and challenging.[26]

In studies of horizontal communication, Berkowitz and Bennis found that interactions with peers were more satisfying than those with superordinates or subordinates.[27] Cohen[28] and Blau and Scott[29] found that peer communication occurring outside of organizational lines was more open and promotive and hence satisfying. As a result, they concluded that when the staff established its own informal communication system, the levels of satisfaction in those organizations was at a high level.

March and Simon found that when staff personnel were free to do so, they tended to channel their communications to those with whom they were friendly.[30] They observed that frequency of informal communication related positively to satisfaction with colleagues, for it permitted an individual to choose his communicators.

One of the better investigations of organizational communication was conducted by Downs and Hazen.[31] They proposed the following composite aspects of communication satisfaction as example indicators: (1) explanation of policies, (2) advance notice of changes, (3) freedom to make suggestions, (4) recognition and expression of appreciation for good performance, and (5) adequacy of information on matters regarded as relevant by the employee.

Based on this composite, Downs and Hazen developed the communication satisfaction survey (CSS) to measure employee perceptions of an organization's communication system. In their study, they found that when a supervisor listened and paid attention to his subordinates, was

open to ideas, and was flexible in handling conflicts and emergencies, these informal communication patterns tended to raise employee job satisfaction to a high level.

Eckert and Stecklein, who conducted a study of faculty members in Minnesota colleges, concluded that peer interaction and companionship offered by the faculty was ranked above other rewards associated with faculty service.[32] Eckert and Stecklein also found that the more input the faculty had in developing their working conditions, the more satisfied they were.

In his studies on organizational behaviors, Abbott recognized a definite relationship between job satisfaction and organizational communication.[33] He was able to show that educators were very satisfied with informal communication channels that existed within educational institutions. Abbott also concluded that the better the working conditions, such as a comfortable faculty lounge, the higher the morale and level of satisfaction among the faculty.

Ross and Berner conducted similar investigations in the 1950's. These two studies focused on the development and adaptation of instruments and procedures for studying the interrelationships of the formal and informal communication patterns of schools. Berner did his research in two secondary schools, and Ross investigated two elementary schools. Four of Berner's conclusions were as follows:

> Informal communication patterns seem to be effected by persons active in positions in the formal structure as well as by persons active in informal socializing.
>
> Informal communication patterns in a school may differ from one activity to another.
>
> Holders of general administrative positions will be key figures in the informal communication patterns of a

> school so long as they are active in informal social participation.
>
> It is possible to analyze the structures of formal communication and the patterns of informal communication and to analyze their interrelationships.[34]

Ross arrived at similar conclusions in his replication of Berner's study. He also found that

> . . . failure to provide time and space for informal socializing may not prevent its occurrence. Informal socializing seemed destined to occur under any circumstances. When the school system did not provide for it, there was a danger that it would go 'underground' and operate at cross purposes with the formal structure.[35]

Greenham, in his doctoral dissertation, directed his efforts to the study of interpersonal communication and the influence of subgroups on group members.[36] He sampled sixty-six classroom teachers in five academic departments at the secondary level. He examined the communication networks that had been developed around selected school issues. He wanted to provide insight into methods for reducing or eliminating conflict between the formal communication and the informal communication networks and for overcoming the barriers to effective communication. Greenham found that the leadership possibilities for an administrator appeared to be enhanced if he was drawn into the informal networks of organizational communication provided he also was able to maintain his formal obligations to the system. Greenham concluded that in administering all or part of a complex school system, communication should be viewed as the central activity in the administrative process.

Barnard was the first theorist to point out the significance of formal communication lines. He called these lines "the communication system."[37] He recognized that the function of formal communication was to coordinate the organization's parts. He suggested that several

factors must be considered when developing and using the formal communication system: (1) the lines of communication must be known, (2) the lines must carry to every member of the organization, (3) the line of communication must be as direct and as short as possible, (4) the complete line of communication typically is used, and (5) every communication is authenticated as being from the correct person occupying the position and within his authority to issue the message.

March and Simon pointed out that when the staff was involved in planned interaction with management, a reduction in work satisfaction resulted.[38] They also found that when management held staff to strict vertical lines of communication, a decreased sense of involvement in the organization was the effect.

Zajonc and Wolfe studied the relationship between the formality of communication systems and employee satisfaction in an industrial company.[39] Employees with extensive formal communication contacts with supervisors showed a low level of job satisfaction. Workers with little involvement in the generation or implementation of new ideas or suggestions in the company demonstrated unfavorable responses to the organization and were highly dissatisfied with their job.

In the investigation of organizational communication within numerous businesses, Downs and Hazen found that more efficient authoritarian communication patterns tended to lessen professional employee job satisfaction.[40] Lack of input into company policies also increased employee dissatisfaction.

Eckert and Stecklein, in their Minnesota faculty study, reported much faculty dissatisfaction with the formal communication system of their college.[41] Complaints were lodged regarding pyramiding committee

duties and excessive work loads. Considerable dissatisfaction was placed on faculty meetings which were characterized as "dull" and "useless." Many faculty members felt that their routine classroom duties assigned through formal communication lines were interfering seriously with their scholarly activities.

Another study done by Campbell and Newell supported the Minnesota college study in some respects.[42] Campbell and Newell mailed survey questionnaires to 2,411 UCEA professors to identify their major concerns and were able to achieve a 78 percent response rate. They reported that professors were dissatisfied with the high frequency of committee assignments and other administrative or quasi-administrative tasks. But despite their dissatisfaction, they desired a more active involvement in college and university governance. Based on this finding, Campbell and Newell reflected that college and university governance should be made more efficient, thereby enabling faculty to be more involved in governance, at least in the policy-making phases, while spending less time in the process.

A cause of tension and dissatisfaction between faculty and formal channels of communication was noted by Bornheimer, Burns, and Dumke.[43] They reported that the refusal to consider faculty input into administration policies and procedures was voiced as a major complaint by faculty in higher education. They further noted that if this condition persisted, it could lead the faculty to seek a union to negotiate its rights.

There was reported evidence of dissatisfaction in formal communication between administration and faculty when Dyke interviewed 106 faculty members at a large midwestern university about their views

concerning faculty participation in academic decision making.[44] He found that the faculty was ambivalent: they believed that the faculty should play a strong, active, and influential role in decision making, but they were reluctant to assume the burden or put in the time. Faculty believed administrators gained power at the faculties' expense. They recognized that administrators controlled the systems of communication on the campus, and they distrusted the administration.

Abbott recognized that when administrators were unable to meet the needs of the other educators and to provide adequate rewards, through formal communication channels, a high level of dissatisfaction resulted.[45] But if the rewards exceeded the needs, then a high level of job satisfaction was produced. The findings of Miskel, Glasnapp, and Hatley supported Abbott's results.[46]

Summary

An overview of the literature that dealt with the aspects of organizational communication within institutions was presented in this chapter. The functional and structural concepts of organizational communication recognized by numerous researchers in the field were reviewed. One group of authors synthesized all kinds of communication into seven aspects: production, maintenance, innovation, flexibility, directionality, initiation, and types of message channels. The first three were functional, and the latter four were structural in nature.

Five organizational theories were reviewed that added support and provided further explanation concerning the seven functional and structural aspects of organizational communication.

The chapter was concluded by citing literature concerning

educational and non-educational institutions that suggested relationships between staff satisfaction and the formality of the communication system.

FOOTNOTES

[1]D. Katz and R. L. Kahn, The Social Psychology of Organizations (New York, 1966).

[2]Maratha A. Jacob, "The Structure and Functions of Internal Communication in Three Religious Communities" (unpub. Ph.D. dissertation, Michigan State University, 1972).

[3]Richard V. Farace, Peter R. Monge, and Hamish M. Russell, Communication and Organizing (Massachusetts, 1976), p. 58.

[4]Ibid., p. 59.

[5]Figure 1 was developed by the writer.

[6]Farace, Monge, and Russell, pp. 75-77.

[7]Ibid.

[8]Katz and Kahn, pp. 107-109.

[9]Barnard, pp. 175-176.

[10]Farace, Monge, and Russell, pp. 75-77.

[11]Ibid.

[12]Max Weber, The Theory of Social and Economic Organizations, edited by T. Parsons, translated by M. Henderson and T. Parsons (New York, 1947).

[13]E. Mayo, The Social Problems of an Industrial Civilization (London, 1949).

[14]Herbert Simon, Administrative Behavior, 2nd ed. (New York, 1957).

[15]Douglas McGregor, "The Human Side of Enterprise," The Management Review (1975), pp. 22-28, 88-92.

[16]Rensis Likert, New Patterns of Management (New York, 1961), pp. 96-98.

[17]Farace, Monge, and Russell, pp. 90-91.

[18]Ibid., p. 81.

[19]Simon, p. 27.

[20]Philip Selznick, TVA and the Grass Root (California, 1949), pp. 37-41.

[21]Peter Blau and Richard W. Scott, Formal Organizations: A Comparative Approach (California, 1962), pp. 87-115.

[22]C. R. Walker and R. H. Guest, The Man on the Assembly Line (Cambridge, 1952), p. 76.

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CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe the methods and procedures used in conducting this study. It is presented in two parts: data collection and analysis and presentation of data. A summary is presented at the end of the chapter.

Data Collection

The population for the study and a description of the questionnaires employed to collect data are discussed first. The procedures used to solicit responses to the questionnaires are then set forth in detail.

Population

The population for this study consisted of all faculty within ten colleges of four major universities in Oklahoma. The Colleges of Education, Arts and Sciences, and Business were examined at the University of Tulsa, Central State University, and Oklahoma State University. At the University of Oklahoma, only the College of Education was willing to participate in the study. The researcher was interested in studying only institutions granting specialist's degrees or higher.

Plan for the Investigation

A research design based on a mail questionnaire type of survey research was utilized. Mouly established the appropriateness and purposes of surveys to be as follows:

> . . . surveys are oriented toward the determination of the status of a given phenomenon rather than toward the isolation of 'causative' factors accounting for its existence . . . the primary goal of the survey is the investigation of the present status of phenomena.[1]

A mail questionnaire was used which permitted an extensive coverage at minimum expense. Its use also enabled the researcher to contact individuals in a relatively short period of time. It is discussed further elsewhere in this chapter.

Operational Definitions

The approach to the study of organizational communication used by Farace, Monge, and Russell was adapted for use in this study. Their categorization of organizational communication was along two dimensions: function and structure. The category was comprised of three components representing kinds of communication. These three kinds of messages were entitled production, maintenance, and innovation. The structural category was comprised of four components entitled flexibility, directionality, initiation, and types of message channels which constitute the framework in which organizational communication occurs. Each of the seven kinds of communication is explained in accordance with the purpose for which it was used.

Functional Components

The three functional components and the kind of messages represented by each were as follows:

Production. Production messages were those used by the office of the dean to: (a) achieve college goals and objectives, (b) regulate work being done, (c) coordinate work to be done, (d) detect problems and provide means for their correction.

Maintenance. Maintenance messages were those used by the office of the dean to: (a) encourage faculty development, (b) improve faculty interaction, (c) encourage faculty identification with college policies and goals.

Innovation. Innovation messages were those used by the office of the dean to: (a) encourage faculty to generate new ideas for the betterment of the college, (b) implement new ideas and suggestions.

Structural Components

The four structural components were as follows:

Degree of Flexibility. The first structural component was the degree of flexibility in the communication system between the office of the dean and the faculty. Systems in which messages consistently followed strict vertical lines of communication were considered to have a low degree of flexibility. In these systems communication lines were vertical and deviation from these lines was not encouraged. Systems in which deviation from vertical lines of communication was encouraged when

necessary for effective functioning of the organization were considered to have a high degree of flexibility.

Directionality of Message Flow. The directionality of message flow was used to identify the patterns of communication (a) between the office of the dean and the faculty, (b) among faculty members. The patterns that were incorporated in the present study were vertical-up, vertical-down, and horizontal.

Initiation. Initiation reflected whether messages were (a) imposed upon the faculty by the office of the dean, (b) sought from the faculty by the office of the dean.

Types of Message Channels. The types of message channels were used to identify the mode of communication between the office of the dean and the faculty. Face-to-face contact, telephone, letters or memoranda, and group meetings were the modes of communication included.

Quantification of Components

The seven components were quantified by using a questionnaire (see Appendix A) which was completed by 660 faculty from the institutions included in the study. The questionnaire in its original form was part of a national long-range project and a series of studies of communication in school administrations during the 1950's. The original instrument was used to measure teachers' attitudes concerning the communication behaviors of their schools. The original questionnaire was part of a cooperative effort by the Department of Educational Administration and the Interdepartment Committee on Research in Communication at Ohio State University.[2]

Because the communication questionnaire was modified by the researcher, a panel of experts was selected to verify the validity of the instrument. A professor of educational administration, Dr. Ken St. Clair, and a professor of higher education, Dr. John Creswell, from Oklahoma State University examined the modified questionnaire against the conceptual base established by Farace, Monge, and Russell and the questions and hypotheses to be used in the study. They concluded that the questionnaire would answer the posited questions and adequately measure the hypotheses to be tested.

Each of the functional and structural components was quantified by computing the mean of properly weighted responses to selected statements from the questionnaire. The statements selected to comprise each of the seven components and the weighting for the responses to these statements are presented in Table II.

Responses weighted three or four were considered indicative of a formal communication system. Responses weighted one or two were considered indicative of an informal communication system. Thus, the mean of an individual faculty's response to statements 1, 5, 12, 18, and 23 indicated that the individual perceived the production component as informal if that mean was less than 2.5. A mean equal to or greater than 2.5 for the individual faculty's responses to these five statements indicated a faculty member who perceived the production component as formal in nature. Likewise, if the mean for responses to these five statements for all faculty in a college was less than 2.5, that college was determined to have a communication system in which the production component was informal. If the mean of the responses across all faculty in a college was equal to or greater than 2.5, that college was

TABLE II

COMMUNICATION QUESTIONNAIRE STATEMENT NUMBERS ASSOCIATED WITH THE MEASURABLE VARIABLE

Purpose	Production	Maintenance	Innovation	Flexibility	Directionality	Initiation	Types of Message Channels
1. Achievement of college goals	1						
2. Regulate work being done	12, 18						
3. Coordination of work	5						
4. Problem detection and correction	23						
5. Encourage faculty development		2					
6. Improve faculty interaction		7, 24					
7. Encourage faculty identification with college policies and goals		13, 19					
8. Generation of new ideas			15, 25				
9. Implementation of suggestions			8, 20				
10. Vertical channels				14			
11. Alternate channels				3			
12. Message flow between the office of the dean and the faculty					4, 21		
13. Message flow among faculty					9		
14. Messages imposed						10	
15. Messages sought						16	
16. Face-to-face contact							6
17. Telephone							22
18. Letters or memoranda							11
19. Group meetings							17

Note: Underlinings indicate statements for which a response indicating maximum formality was assigned a weight of four. Responses for all other items were reversed to be consistent with this weighting.

determined to have a communication system in which the production component was formal. Quantification and interpretation of the other functional components, maintenance and innovation, was similar.

Although the structural components were quantified in the same manner, interpretation of the responses to the statements requires explanation. For the degree of flexibility, directionality, and initiation components, high responses and, consequently, high means on these components indicated low flexibility, vertical communication patterns, and the initiation of messages by the office of the dean.

A slightly different interpretation was required for the types of message channel component. Weighted responses to each of the statements measuring this component indicated the frequency with which the dean's office utilized informal message channels (face-to-face contact and telephone conversations) or formal message channels (meetings, memoranda, and letters). Thus, the mean of the responses indicating the frequency of use of each of these channels was interpreted to indicate the formality-informality of the mode by which the message was communicated. The mean of the responses, however, should not be interpreted to indicate that the average communication with the office of the dean was somewhere between a telephone call and a meeting in mode.

Pilot Survey

In order to test for reliability of the questionnaire response, the researcher conducted a pilot survey. This was accomplished by selecting one college that was not part of the population.

The College of Home Economics at Oklahoma State University was selected because of the close proximity and availability for the

researcher, and it typified the characteristics of the colleges that were to be examined. The dean of the College of Home Economics granted permission for the instrument to be pilot tested in the college. The instrument was delivered to the entire faculty of the college. These individuals were asked to complete the questionnaires and to make comments as to clarity and appropriateness of the statements and to indicate any difficulty they had in completing the questionnaire.

Forty-one completed instruments were mailed to the researcher which represented a return rate of 67 percent. The questionnaires were analyzed by utilizing the Likert Scale Scoring Program[3] and the IBM 370 computer at Oklahoma State University. The Likert Scale Scoring Program provided output that included the number responding to each statement, statement means and standard deviations, component means and standard deviations, and Cronbach coefficient alpha reliability estimate.[4] Analysis of the pilot survey data was performed in two steps. The first step analyzed the responses which reported the frequency of occurrence of the communication behavior. A second step analyzed the responses which were designed to elicit levels of satisfaction experienced with the communication behavior.

The Cronbach coefficient alpha for the frequency response was 0.87. The Cronbach coefficient alpha for the satisfaction responses was 0.95. Based on the responses and comments received through the pilot survey, the reliability of the questionnaire was considered adequate. Only minor problems were noted in the clarity and structure of the questionnaire. Corrections were made as required.

Procedures

The deans of each of the ten colleges in the study were contacted first by a letter of introduction with an attached copy of the questionnaire. The purpose of the study and the need for assistance from the faculties of their colleges was explained. Then, the researcher made follow-up telephone calls to each dean to ask for an appointment to discuss the study. Each dean ensured the cooperation of his faculty in the investigation.

The exact number of instruments was delivered to the dean of each college. The distribution of one instrument to each faculty member was accomplished through the office of the dean. Each of the 1,020 instruments contained a cover letter (see Appendix A) explaining the objectives of the study, the questionnaire, and a self-addressed, stamped envelope.

Responses to Questionnaires

Within three weeks, approximately 50 percent of the questionnaires were returned. Telephone calls were made to each dean to request that they encourage their faculty to complete the questionnaires. This resulted in 150 additional responses. It is shown in Table III that the percentage of returns varied from a high of 93.3 percent from the College of Business to a low of 50.0 percent from the College of Arts and Sciences at the University of Tulsa. The range for Colleges of Education was from 64.7 to 77.5 percent. The range for Colleges of Arts and Sciences was from 50.0 to 90.0 percent. The range for Colleges of Business was from 50.0 to 93.3 percent.

TABLE III

RESPONSE RATE OF RETURNED QUESTIONNAIRES

Institutions of Higher Education	Colleges	Number of Questionnaires Delivered	Number of Returns After Three Weeks	Percent of Returns After Three Weeks	Number of Questionnaires Returned After Telephone Calls	Cumulative Percent of Returns
Oklahoma State University	Education	119	63	52.9	77	64.7
	Arts & Sciences	400	208	52.0	266	66.5
	Business	84	34	40.5	42	50.0
University of Oklahoma	Education	52	27	51.9	31	59.6
University of Tulsa	Education	40	25	62.5	32	80.0
	Arts & Sciences	120	47	39.2	60	50.0
	Business	30	18	60.0	28	93.3
Central State University	Education	60	21	35.0	46	76.7
	Arts & Sciences	50	43	86.0	45	90.0
	Business	65	23	35.4	33	50.8
Total		1,020	509	49.9	660	64.7

Analysis and Presentation of Data

This section consists of a statement of the four primary questions with which the study was concerned. The first two were satisfied by using the Likert Scale Scoring Program to calculate the frequency of occurrence of the communication behaviors utilized by the office of the dean. The third question was answered by testing certain null hypotheses using the Likert Scale Scoring Program and the Scattergram subprogram of SPSS. The fourth question was answered by examining certain null hypotheses utilizing the Likert Scale Scoring Program, the Two-Factor Mixed Design of Analysis of Variance, and the Newman-Keuls' Multiple-Range Test.

Primary Question Number One

Are the communication systems within institutions of higher education more formal or informal?

Primary Question Number Two

What was the extent of usage of the seven kinds of communication messages utilized in institutions of higher education by the office of the dean?

Primary Question Number Three

Do faculties within institutions of higher education experience greater levels of satisfaction within organizations that have communication systems characterized as formal or informal?

One major null hypothesis and three minor null hypotheses were

developed to answer primary question number three. These null hypotheses were as follows:

HYPOTHESIS 1: There is no relationship between the level of communication satisfaction experienced by faculties in institutions of higher education and the formality of the communication system utilized.

HO 1.1: There is no relationship between the level of communication satisfaction experienced by faculties in Colleges of Education and the formality of the communication system utilized.

HO 1.2: There is no relationship between the level of communication satisfaction experienced by faculties in Colleges of Arts and Sciences and the formality of the communication system utilized.

HO 1.3: There is no relationship between the level of communication satisfaction experienced by faculties in Colleges of Business and the formality of the communication system utilized.

Primary Question Number Four

What levels of satisfaction do faculties within institutions of higher education experience with respect to the seven kinds of communication behaviors?

One major null hypothesis and three minor null hypotheses were developed to answer primary question number four. These hypotheses were as follows:

HYPOTHESIS 2: The level of communication satisfaction experienced by faculty of institutions of higher education is equal for the seven components of communication.

HO 2.1: The level of communication satisfaction experienced by faculty within Colleges of Education is equal for the seven components of communication.

HO 2.2: The level of communication satisfaction experienced by faculty within Colleges of Arts and Sciences is equal for the seven components of communication.

HO 2.3: The level of communication satisfaction experienced by faculty within Colleges of Business is equal for the seven components of communication.

Questions Number One and Two. Data pertinent to primary questions one and two were analyzed by computing the mean of the frequency of occurrence responses to all 25 questionnaire statements within colleges. A mean of these 25 statement means was then computed for the three types of colleges included in the study. The purpose of this second mean was to provide a measure of formality-informality for each college type. This second mean was expressed on the same one to four scale used for each questionnaire statement. The mean of the three college means was computed to provide a comparable measure of formality-informality across all colleges included in the study. The last two means were unweighted (i.e., each college, not each faculty member, contributed equally).

Seven additional means were computed for each type of college. Each of the means corresponded to one of the seven components of organizational communication. Thus, a measure of the formality-informality of each component was provided for each type of college. A mean across types of colleges was also computed for each component. The means of the seven components within and across types of colleges were computed in a manner (unweighted) similar to that described in the previous paragraph.

Questions Number Three and Four. Data pertinent to the null hypotheses were first analyzed by the Likert Scale Scoring Program. The questionnaire statements were grouped according to the appropriate components, and a total score for each of the seven components was

computed. Using the output from this program, the null hypotheses of question number three were tested for statistical significance by utilizing the Pearson Product Moment Correlation Coefficient of the Scattergram subprogram of SPSS. For primary question number four, the output from the Likert Scale Scoring Program was used to test the null hypotheses by utilizing the Two-Factor Mixed Design Analysis of Variance. The Newman-Keuls' Multiple-Range Test was applied to the output from the Two-Factor Mixed Design to determine pairwise differences of each of the seven types of communication behaviors within institutions of higher education.

Summary

Chapter III consisted of a description of the methodology employed in the study. A population was determined, a pilot survey was conducted, and the revised questionnaires were distributed to 1,020 faculty members in ten colleges within four major universities in Oklahoma. Returns were obtained from 64.7 percent of those receiving questionnaires. The data derived from the questionnaires were analyzed statistically by utilizing the Likert Scale Scoring Program and the Pearson Product Moment Correlation Coefficient of the Scattergram Subprogram of SPSS to answer the first three research questions. The fourth question was analyzed statistically by using a Two-Factor Mixed Design Analysis of Variance and the Newman-Keuls' Multiple-Range Test.

FOOTNOTES

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[3]David W. Perrin, Likert Scale Scoring Program (University of Iowa, 1974).

[4]L. J. Cronbach, "Coefficient Alpha and the Internal Structure of Tests," Psychometrika (1951), pp. 297-334.

CHAPTER IV

FINDINGS

An analysis of the data collected in the investigation is presented in four sections in this chapter. Each section corresponds to one of the four primary questions posited in the study. In section one, data pertaining to whether the communication systems within institutions of higher education are more formal or informal are presented. In section two, data related to the extent of usage of the seven components of communication utilized in institutions of higher education by the office of the dean are reported. In section three, data pertaining to whether faculties within institutions of higher education experience greater levels of satisfaction within organizations that have communication systems characterized as formal or informal are presented. In section four, data related to the level of satisfaction faculties of institutions of higher education experienced with respect to the seven components of communication are discussed. A summary of the findings is presented at the end of the chapter.

Primary Question Number One

An opportunity was provided for faculty members to express their opinions on whether the communication system in their college was more formal than informal. The computed mean scores of the frequency of occurrence of thirteen formal and twelve informal type communication

messages were utilized to determine the formality of the communication system. A mean score of the responses that was less than or equal to 2.5 indicated that the communication system was generally informal. A mean score that was greater than 2.5 indicated that the communication system was generally formal. Primary question number one was stated as follows:

> Primary Question Number One: Are the communication systems within institutions of higher education more formal or informal?

Formality Within Institutions of Higher Education

It is shown in Table IV that the mean of responses from all institutions of higher education was 2.36. Thus, overall, the communication systems within institutions of higher education were slightly informal in nature. The mean of the responses from Colleges of Education and Business were 2.28 and 2.26, respectively. Thus, it was determined that Colleges of Education and Business had similar informal communication systems. Although the communication system in Colleges of Arts and Sciences was not as informal as those in the other two types of colleges, the mean of the responses was 2.43 and consequently still slightly informal.

TABLE IV

MEAN SCORES UTILIZED TO DETERMINE FORMALITY WITHIN INSTITUTIONS OF HIGHER EDUCATION

Colleges	Mean Score
Education	2.28
Arts and Sciences	2.43
Business	2.26
All Institutions	2.36

Formality With Respect to Components of Organizational Communication

It was revealed by further examination of the frequency of occurrences, as shown in Table V, that there were varying levels of formality associated with the seven different components of communication. Those differences are discussed below.

TABLE V

MEAN SCORES OF THE SEVEN KINDS OF COMMUNICATION MESSAGES IN INSTITUTIONS OF HIGHER EDUCATION

College	Production	Maintenance	Innovation	Flexibility	Directionality	Initiation	Types
Education	1.95	2.39	2.23	2.68	2.29	2.04	2.50
Arts and Sciences	2.16	2.57	2.61	2.64	2.39	2.39	2.49
Business	1.88	2.33	2.20	2.75	2.32	2.00	2.56
All Institutions	2.00	2.43	2.35	2.69	2.33	2.25	2.52

Production. The mean of the production component for all colleges was 2.00. That indicated a slight informal approach characterized production messages utilized in institutions of higher education.

The means of the production component for Colleges of Education and Business were 1.95 and 1.88, respectively. Thus, it was found that there was a greater degree of informality associated with production messages in Colleges of Education and Business than in Colleges of Arts and Sciences where the mean was 2.16.

Maintenance. The mean of the maintenance component for all colleges was 2.43. That indicated a slight informal pattern for maintenance messages utilized in institutions of higher education.

The means of the maintenance component for Colleges of Education and Business were 2.39 and 2.33, respectively. Therefore, it was found that a degree of informality was associated with maintenance messages in Colleges of Education and Business. With respect to Colleges of

Arts and Sciences, a different communication pattern for the maintenance component was indicated. With a mean of 2.57, it was found that Colleges of Arts and Sciences exhibited a slight degree of formality for maintenance messages.

Innovation. The mean of innovation component for all colleges was 2.35. That indicated a slight informal pattern for innovation messages utilized in institutions of higher education.

The means of the innovation component reflected a communication pattern similar to that associated with maintenance messages. The Colleges of Arts and Sciences data had a mean of 2.61 which was slightly formal. The Colleges of Education and Business data had means of 2.23 and 2.20, respectively. That suggested a slightly informal approach for innovation messages.

Flexibility. With respect to the degree of flexibility in the communication system, the mean for all colleges was 2.69. That indicated a slightly formal approach characterized the amount of flexibility in the communication networks of institutions of higher education.

The mean for the degree of flexibility for Colleges of Business was 2.75. Thus, it was found that there was a greater degree of formality associated with flexibility in Colleges of Business than in Colleges of Education and Arts and Sciences where the means were 2.68 and 2.64, respectively.

Directionality. The mean for the directionality of message flow for all colleges was 2.33. That indicated a slight informal approach to the directionality of the flow of messages in institutions of higher

education.

The means for directionality of message flow for Colleges of Education and Business were 2.29 and 2.32, respectively. Therefore, it was found that more formality was associated with the directionality of message flow in Colleges of Education and Business than in Colleges of Arts and Sciences where the mean was 2.39.

Initiation. The mean of the initiation component for all colleges was 2.25. That indicated a slight informal approach characterized the initiation component in institutions of higher education.

The mean of the initiation component for Colleges of Arts and Sciences was 2.39. Thus, it was found that there was a greater degree of informality associated with initiation of messages in Colleges of Arts and Sciences than in Colleges of Education and Business where the means were 2.04 and 2.00, respectively.

Types of Message Channels. The mean for the types of message channels component for all colleges was 2.52. That indicated a slight formal approach characterized the types of message channels in institutions of higher education. That is, the faculty perceived that communication was accomplished by formal mode (letters and meetings) with greater frequency than by informal modes (face-to-face and telephone).

The means for the types of message channels for Colleges of Education and Business were 2.50 and 2.56, respectively. Therefore, it was found that a degree of formality was associated with the types of message channels utilized in Colleges of Education and Business. With respect to Colleges of Arts and Sciences, a different communication

pattern for the types of message channels was indicated. With a mean of 2.49, it was found that Colleges of Arts and Sciences exhibited a slight degree of informality for this component.

Primary Question Number Two

The questionnaire provided an opportunity for faculty members to indicate the frequency of usage of the seven components of communication utilized by the office of the dean in institutions of higher education. Question 1 required that this data be presented along a formal-informal continuum. Question 2 required a different presentation of this same data. Primary question number two was stated as follows:

> Primary Question Number Two: What was the extent of usage of the seven components of communication utilized in institutions of higher education by the office of the dean?

Extent of Usage of the Seven Components of Communication

It is shown in Figure 2 that the means of the frequency of occurrence responses of all seven components within institutions of higher education fell between the "often occurs" and the "sometimes occurs" responses. With a mean of 2.69, the actions implying informality (high flexibility) in the communication system occurred the least often. The formal aspects of the production and initiation components occurred more frequently as indicated by means of 2.00 and 2.25, respectively. The directionality component had a mean score of 2.33 which was slightly below those of maintenance and innovation components for which

the means were 2.43 and 2.35, respectively. The types of message channels component had a mean of 2.52.

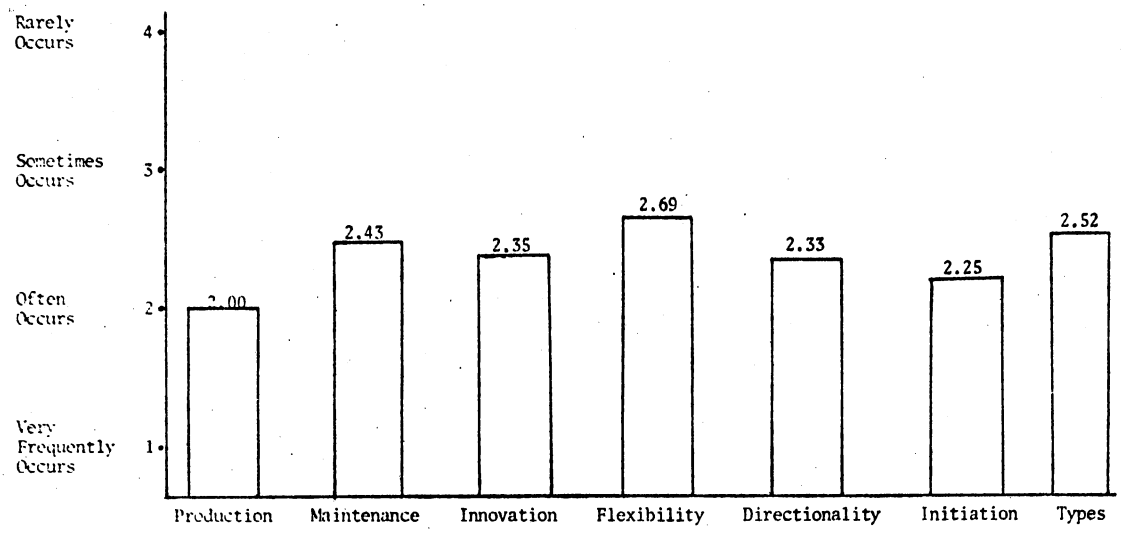

Figure 2. Mean Scores of the Frequency of Occurrence of the Seven Kinds of Communication Messages of Institutions of Higher Education

Colleges of Education. It is shown in Figure 3 that the mean of the frequency of occurrence of the seven components of communication associated with Colleges of Education fell between the "often occurs" and the "sometimes occurs" responses. With respect to Colleges of Education, production and initiation components with means of 1.95 and 2.04, respectively, occurred often. A flexible communication component with a mean of 2.68 occurred sometimes and less frequently than any of

the other seven components of communication. Innovation and the directionality components with means of 2.23 and 2.29, respectively, occurred often with similar regularity. Only six-hundredths of a unit separated the two. The types of message channels component had a mean of 2.50 which indicated a sometimes classification of occurrence. Maintenance type messages with a mean score of 2.39 occurred often.

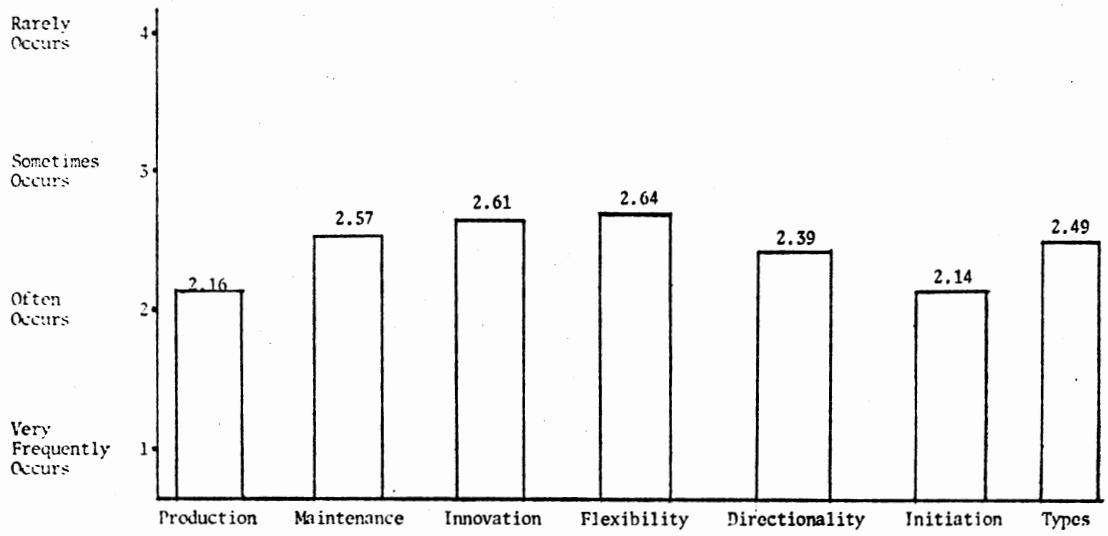

Figure 3. Mean Scores of the Frequency of Occurrence of the Seven Components of Communication Within Colleges of Education

Colleges of Arts and Sciences. It is shown in Figure 4 that the mean of the frequency of occurrence of the seven components of communication for Colleges of Arts and Sciences fell between the "often occurs" and the "sometimes occurs" responses. With respect to Colleges

of Arts and Sciences, production and initiation components with means of 2.16 and 2.14, respectively, were not only closer in unit value than any of the other seven components but also were the most prevalent components utilized. The least frequently utilized component was the degree of flexibility having a mean of 2.64. Maintenance and innovation components had means of 2.57 and 2.61, respectively, which demonstrated a sometimes classification of occurrence. The types of message channels and the directionality components with means of 2.49 and 2.39, respectively, occurred often.

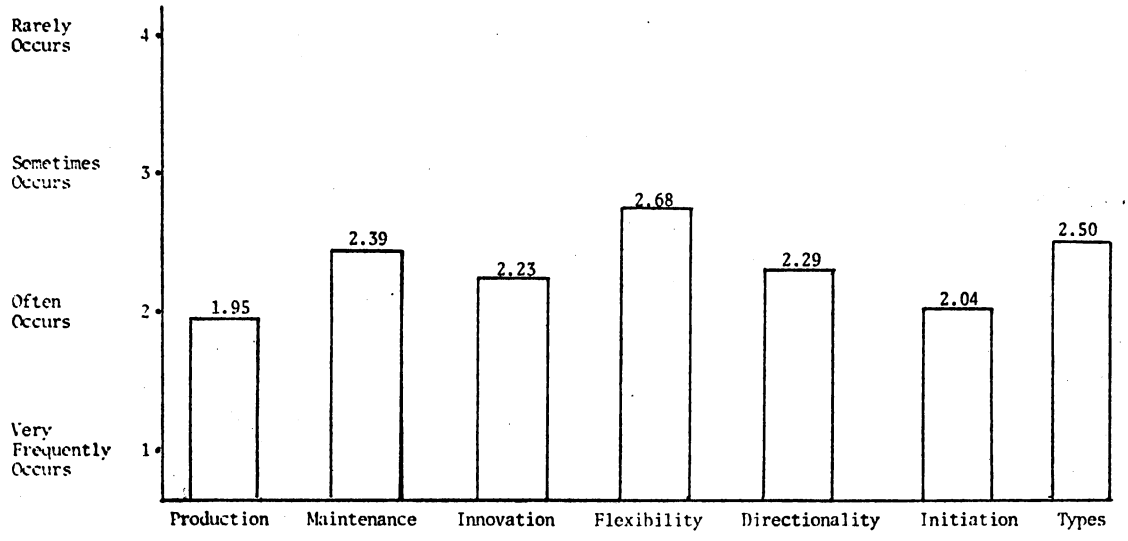

Figure 4. Mean Scores of the Frequency of Occurrence of the Seven Components of Communication Within Colleges of Arts and Sciences

Colleges of Business. It is shown in Figure 5 that the mean of the frequency of occurrence of the seven components of communication associated with Colleges of Business fell between the "often occurs" and the "sometimes occurs" responses. With respect to Colleges of Business, production and initiation components with means of 1.88 and 2.00, respectively, occurred often. Represented by a mean score of 2.75, the degree of flexibility component occurred sometimes and less frequent than any of the other seven components of communication. Maintenance and the directionality components with means of 2.33 and 2.32, respectively, occurred often and with similar regularity. Only one-hundredth of a unit separated the two. Innovation component had a mean of 2.20 which indicated an often classification of occurrence. The types of message channels component with a mean of 2.56 occurred sometimes.

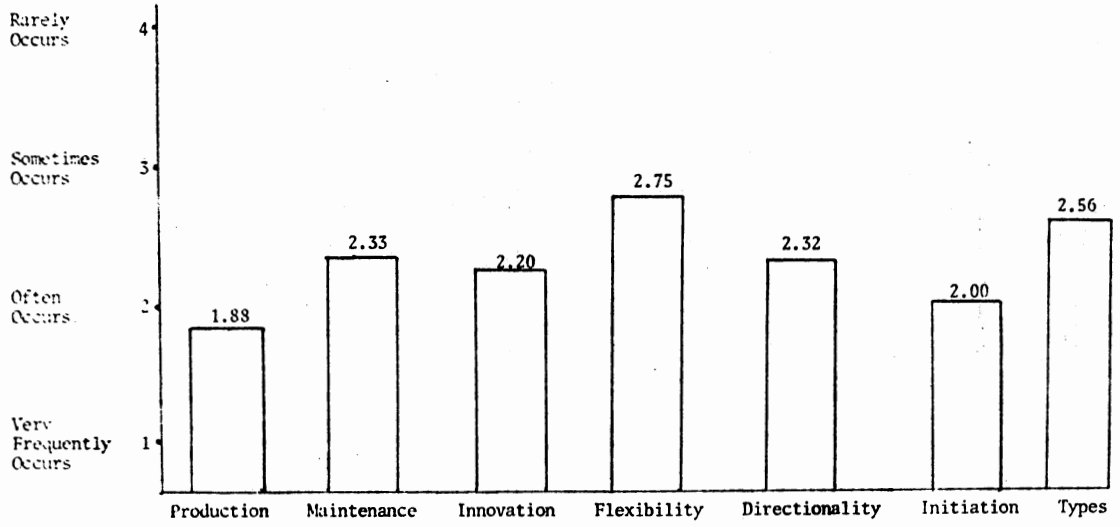

Figure 5. Mean Scores of the Frequency of Occurrence of the Seven Components of Communication Within Colleges of Business

Primary Question Number Three

An opportunity was provided for faculty members not only to express their opinions on the nature and frequency of occurrence of the communication system used in their colleges but also to rate seven communication components with respect to four levels of satisfaction. Faculty members indicated their level of satisfaction for each of these components by designating one of the following alphabetic codes:

A = Always Satisfied
B = Often Satisfied
C = Sometimes Satisfied
D = Rarely Satisfied

Each alphabetic character was converted to numeral values in order to allow summation of responses across statements and permit computation of a Pearson Product Moment Correlation Coefficient. The correlation of the total scores for the levels of satisfaction and frequency of occurrence were calculated for each of the seven components. Primary question number three was stated as follows:

> Primary Question Number Three: Do faculties within institutions of higher education experience greater levels of satisfaction within organizations that have communication systems characterized as formal or informal?

One major hypothesis and three minor hypotheses were developed to answer primary question number three.

> HYPOTHESIS 1: There is no relationship between the level of communication satisfaction experienced by faculties in institutions of higher education and the formality of the communication system utilized.

There was a statistically significant relationship between the level of satisfaction experienced by faculties in institutions of higher education and the formality of the communication system utilized. Based on the data presented in Table VI, hypothesis 1 was rejected for all

seven components. The strongest association between faculty satisfaction and the formality of the communication system was on the innovation component where the correlation coefficient was 0.92. The weakest relationship was on the flexibility component for which the correlation coefficient was 0.21. Scattergrams of the relationship between total faculty satisfaction scores and the formality of each of the seven communication components are displayed in Appendix B.

TABLE VI

CORRELATIONS BETWEEN FREQUENCY OF OCCURRENCE AND FACULTY SATISFACTION FOR COMMUNICATION COMPONENTS IN INSTITUTIONS OF HIGHER EDUCATION*

College	Production	Maintenance	Innovation	Flexibility	Directionality	Initiation	Types
Education	.79	.75	.87	.19	.57	.58	.48
Arts and Sciences	.89	.82	.94	.23	.77	.66	.48
Business	.83	.77	.89	.26	.61	.76	.42
All Institutions	.86	.81	.92	.21	.70	.65	.45

Note: The correlation coefficients reported in this table represent the relationship of frequency of occurrence and faculty satisfaction for the seven components within each type of college and for the total sample.

* All correlation coefficients were significant at the 0.01 level of confidence.

HO 1.1: There is no relationship between the level of communication satisfaction experienced by faculties in Colleges of Education and the formality of the communication system utilized.

There was a statistically significant relationship between the level of satisfaction experienced by faculties in Colleges of Education and the formality of the communication system utilized. The correlation coefficients for HO 1.1 caused the null hypothesis to be rejected for all components as shown by the supporting data in Table VI. The strongest relationship between faculty satisfaction and the formality of the communication system was on the innovation component with a correlation coefficient of 0.87. The weakest relationship was on the flexibility component which had a correlation coefficient of 0.19. Scattergrams of the relationship between faculty satisfaction and the formality of each of the seven components for Colleges of Education are shown in Appendix C.

HO 1.2: There is no relationship between the level of communication satisfaction experienced by faculties in Colleges of Arts and Sciences and the formality of the communication system utilized.

There was a statistically significant relationship between the level of satisfaction experienced by faculties in Colleges of Arts and Sciences with respect to the formality of the communication system utilized. As indicated by the data presented in Table VI, the correlation coefficients for HO 1.2 caused the null hypothesis to be rejected for all seven components. The strongest relationship between faculty satisfaction and the formality of the communication system was for the innovation component with a correlation coefficient of 0.94. The weakest relationship was in flexibility component which had a correlation coefficient of 0.23. Scattergrams of the relationship between

faculty satisfaction and the formality of each of the seven components for Colleges of Arts and Sciences are displayed in Appendix D.

> HO 1.3: There is no relationship between the level of communication satisfaction experienced by faculty in Colleges of Business and the formality of the communication system utilized.

There was a statistically significant relationship between the level of satisfaction experienced by faculties in Colleges of Business with respect to the formality of the communication system utilized. The correlation coefficients for HO 1.3 caused the null hypothesis to be rejected for all components as shown by the supporting data in Table VI. The strongest association between faculty satisfaction and the formality of the communication system was on the innovation component with a correlation coefficient of 0.89. The weakest association was in the flexibility component which had a correlation coefficient of 0.26. Scattergrams of the relationship between faculty satisfaction and the formality of each of the seven components for Colleges of Business are shown in Appendix E.

Primary Question Number Four

Faculty members within institutions of higher education were given an opportunity to identify the organizational communication in their colleges by indicating the nature and frequency of occurrence of the communication behaviors. They were also given the opportunity to indicate their level of satisfaction with respect to the seven communication components.

Mean statement scores for the seven components were computed by dividing the component scores from the Likert Scale Scoring Program by

the number of statements contributing to that component. These mean statement scores were utilized to test null hypotheses related to primary question number four. Primary question number four was stated as follows:

> Primary Question Number Four. What levels of satisfaction do faculties of institutions of higher education experience with respect to the seven communication components?

One major hypothesis and three minor hypotheses were developed to answer primary question number four. These hypotheses were as follows:

> HYPOTHESIS 2: The level of satisfaction experienced by faculties of institutions of higher education is equal for the seven components of communication.

There was no significant difference between colleges. The F-test value of 0.2808 indicated non-significance. That means that faculties within Colleges of Education, Arts and Sciences, and Business were equally satisfied with the overall communication system (both function and structure) of their respective colleges.

There was a statistically significant relationship between the level of satisfaction experienced by faculties of institutions of higher education with respect to the seven communication components. As indicated in Table VII, the F-test value of 1622.505 was significant and, therefore, hypothesis 2 was rejected.

Examination of the results reported in Table VII revealed that there was a significant interaction between the seven communication components and college type. This interaction suggested that the differences among the seven components varied between the types of colleges. An examination of Table VIII and its graphical portrayal of the interaction in Figure 6 revealed that faculties of all types of

TABLE VII

ANALYSIS OF THE DIFFERENCE BETWEEN THE LEVEL OF SATISFACTION EXPERIENCED BY FACULTIES OF INSTITUTIONS OF HIGHER EDUCATION WITH RESPECT TO THE SEVEN COMMUNICATION COMPONENTS

Source	df	s.s.	m.s.	F	p
Total	4619	4178.4766			
Between Subjects	659	1211.9063			
College Type	2	1.0352	0.5176	0.2808	0.7594
$Error_b$	657	1201.8711	1.8430		
Within Colleges	3960	2966.5703			
Components	6	2104.7148	350.7856	1622.5050	0.0000
Components x College Type	12	9.4922	0.7910	3.6586	0.0001
$Error_w$	3942	852.3636	0.2162		

colleges basically experienced similar levels of satisfaction. This examination also revealed that the pattern of differences among the satisfaction levels for the seven components was strikingly similar. Because of this similarity and the exploratory nature of this study, in spite of the interaction, the main effect of components was further examined for the total design rather than within types of colleges. Thus, the pattern of differences among the means of the seven components was considered to be the same for all types of colleges.

TABLE VIII

MEANS OF THE LEVELS OF SATISFACTION EXPERIENCED BY FACULTIES OF INSTITUTIONS OF HIGHER EDUCATION WITH RESPECT TO THE SEVEN COMMUNICATION COMPONENTS

College	Production	Maintenance	Innovation	Flexibility	Directionality	Initiation	Types
Education	2.6156	2.9583	2.3696	1.2030	1.6761	1.0202	2.3844
Arts and Sciences	2.5527	3.0412	2.2520	1.2703	1.7595	1.0412	2.4000
Business	2.7163	2.9712	2.4495	1.1971	1.6442	1.1034	2.4736
All Institutions	2.5962	3.0068	2.3163	1.2398	1.7178	1.0451	2.4072

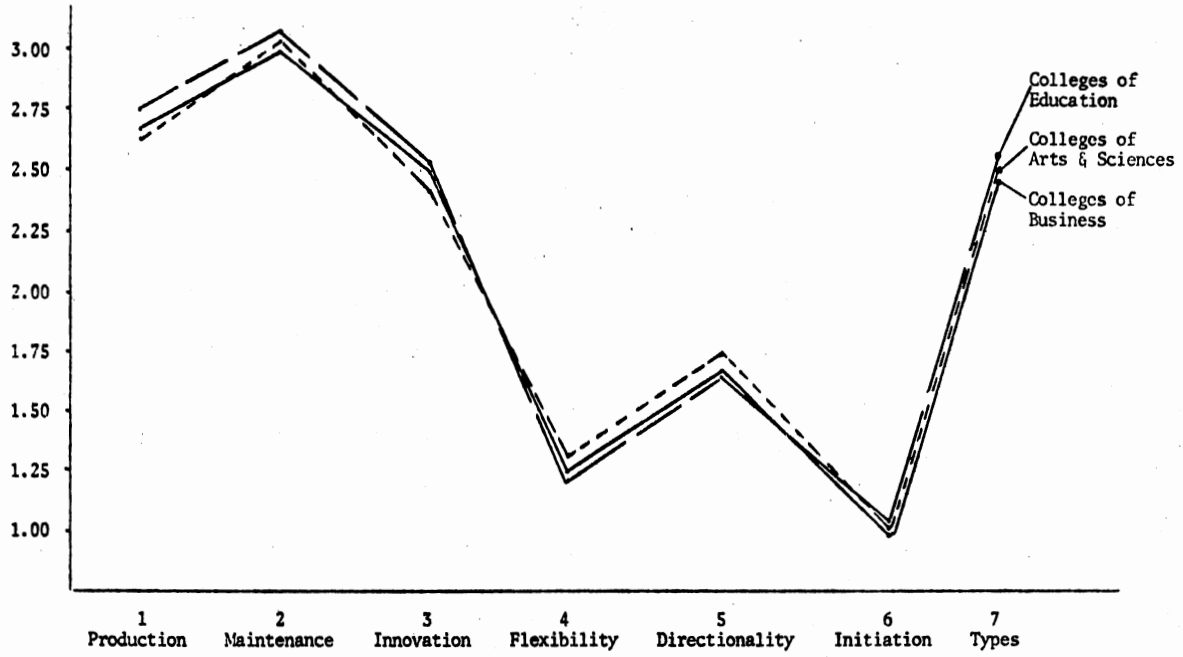

Figure 6. Graphical Interaction of the Means of Institutions of Higher Education With Respect to the Seven Communication Components

To determine pairwise differences among the means for the seven components, the Newman-Keuls' Multiple-Range Test was utilized. All possible pairwise differences exceeded the appropriate critical difference at the 0.01 level of significance.

HO 2.1: The level of communication satisfaction experienced by faculty within Colleges of Education is equal for the seven components of communication.

HO 2.2: The level of communication satisfaction experienced by faculty within Colleges of Arts and Sciences is equal for the seven components of communication.

HO 2.3: The level of communication satisfaction experienced by faculty within Colleges of Business is equal for the seven components of communication.

Hypotheses 2.1, 2.2, and 2.3 were not tested because of the strong

similarities in the interaction of the means of the college types with respect to the seven communication components. All possible pairwise differences can be determined by an examination of Figure 6.

Summary

This chapter was divided into four sections. Each section was related to one of the four primary questions. The first two questions were satisfied in a narrative manner. Null hypotheses pertinent to questions three and four were tested and answered by statistical techniques. The questions answered were related to the following topics:

Formality of the Communication System

The formality of the communication system within institutions of higher education was discussed in section one. It was shown that the overall communication system within institutions of higher education was slightly informal in nature. The relationship is summarized in Figure 7.

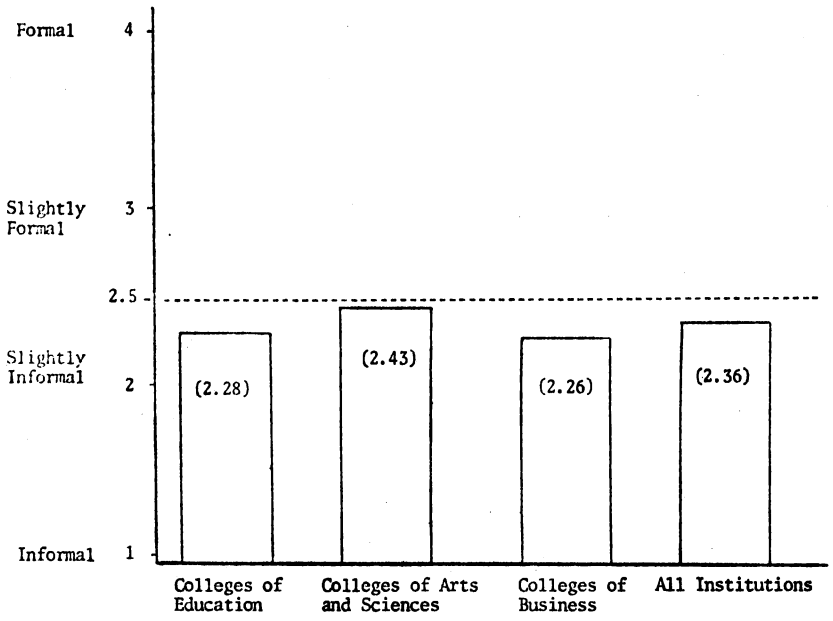

Figure 7. The Formality of the Communication Approach Utilized by Institutions of Higher Education

An examination of the seven communication components revealed varying levels of formality. The various patterns are shown in Figure 8. In institutions of higher education, there were more informal kinds of communication than formal. It was found that the types of message channels and the degree of flexibility were the only two of the seven components that could be characterized as formal. The other five components were found to be slightly informal in nature.

In Colleges of Education, only the degree of flexibility and the types of message channels were found to be formal. The other five communication components were found to be informal.

It was found that maintenance, innovation, and the degree of

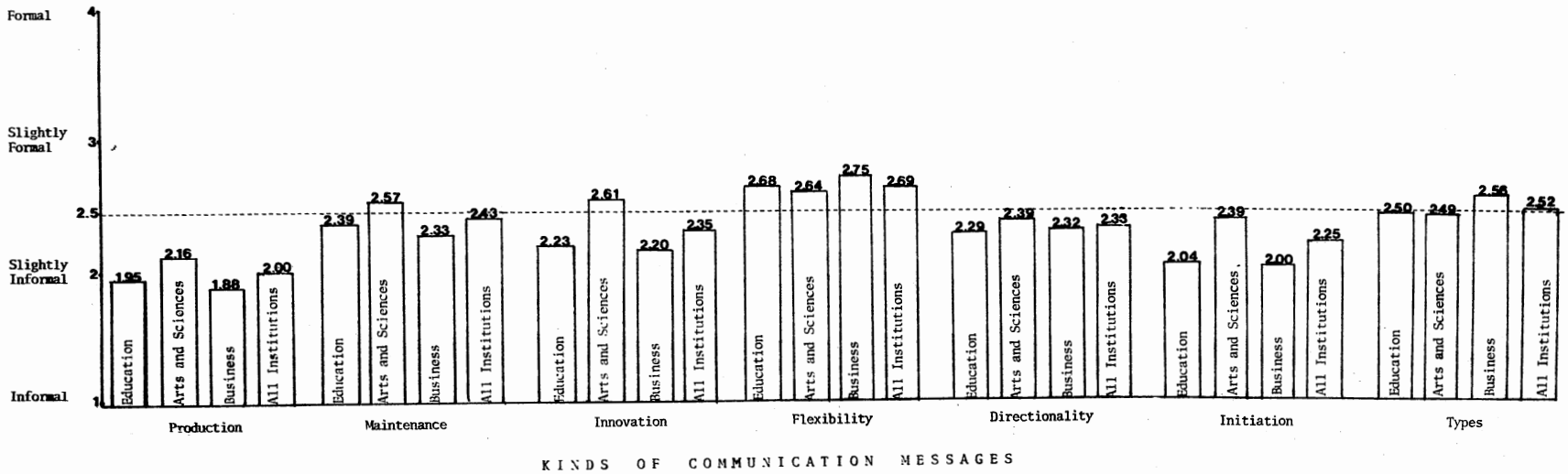

Figure 8. The Formality of the Communication Approach Utilized by Institutions of Higher Education With Respect to the Seven Kinds of Communication Messages

flexibility components could be characterized as being formal in nature in Colleges of Arts and Sciences. The other four communication components were slightly informal.

In Colleges of Business, it was found that five of the seven communication components: production, maintenance, innovation, initiation, and directionality, were slightly informal. The other two communication components were formal in nature.

Extent of Usage of the Seven Communication Components

In section two, a discussion related to the extent of usage of the seven communication components was presented. It is shown in Figure 9 that production messages occurred often and were the most utilized type of communication within all institutions of higher education. The degree of flexibility in the communication system fell between the "often occurs" and the "sometimes occurs" responses and was the one communication component least used by all colleges.

Level of Satisfaction Associated With the Formality of the Communication System

It was found that there were statistically significant relationships between the level of communication satisfaction experienced by faculties within all institutions of higher education and the formality of the communication utilized. The strongest relationship between faculty satisfaction and the formality of the communication system was with the innovation component. The weakest relationship was with the degree of flexibility component.

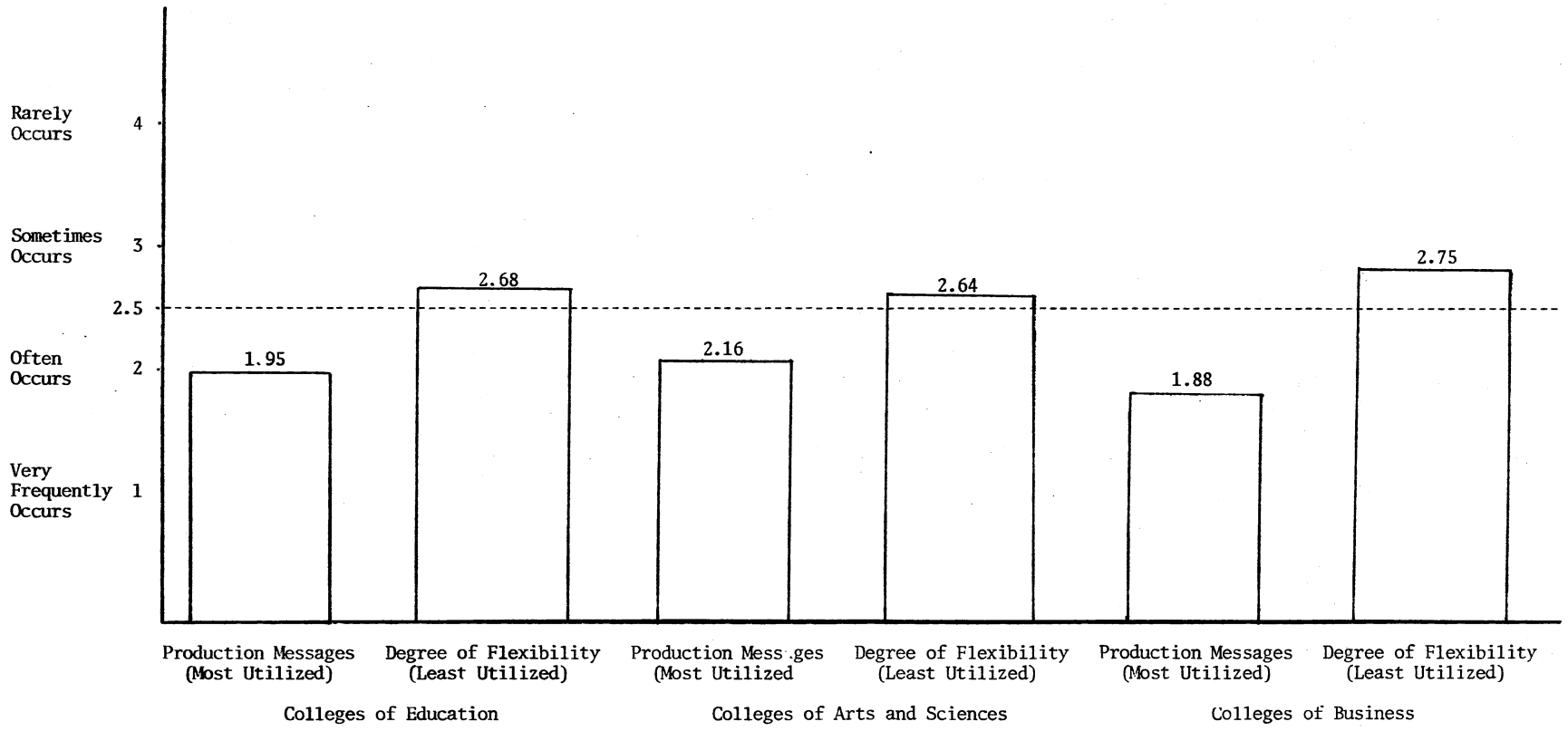

Figure 9. The Formality of the Communication Approach Utilized by Institutions of Higher Education

Level of Satisfaction With Respect to the Seven Communication Components

It was found that there were statistically significant relationships between the level of communication satisfaction experienced by faculties within all institutions of higher education with respect to the seven communication components. It was also established that there was no statistically significant relationship between the Colleges of Education, Arts and Sciences, and Business with respect to the level of communication satisfaction the faculties experienced with the communication system.

CHAPTER V

SUMMARY AND CONCLUDING STATEMENTS

In the preceding chapters, an introduction to the problem, a review of the related literature, a discussion of the methodology, and an analysis of the data were presented. In Chapter V, a summary of the study and concluding statements are presented.

Summary

The summary of the study is presented in this section. It includes an abbreviated review of the problem, purpose, need for the study, questions, limitations and delimitations, and related literature. A recapitulation of the methodology and the findings are also reported.

The Problem

Communication is an area of persistent concern to any organization, institution, agency, or enterprise. The study of communication in institutions of higher education is of special import because of the large size, high degree of complexity, and the need for effectiveness.

Considerable work still remains to be done with respect to the specificity with which the dimensions of communication can be studied and mutual relations among those dimensions established. The assumed effects of certain types of communication in institutions of higher education on the mental and behavioral aspects of faculty members rarely

have been studied. One such aspect of major concern is faculty satisfaction as it is related to various communication components.

The Purpose

One purpose of the study was to identify the nature and frequency of the various communication components utilized between the office of the deans and the faculties in senior institutions of higher education. A second purpose was to ascertain the relationship between the level of communication experienced by college faculty members and each aspect and frequency of communication utilized.

The Need for the Study

Research concerning job satisfaction and its correlates has been restricted almost exclusively to employees in non-educational organizations. No studies could be found through which the association of measurable properties of organizational communication to faculty satisfaction in institutions of higher education were identified. Thus, there was a need for information by deans and other college administrators concerning the most prevalent kinds of organizational communication existing in colleges. In addition, there was the necessity for insight into the types of communication administrators should employ with their faculty in order to establish or enhance a high level of satisfaction.

Questions

Answers to the following four primary questions were sought through this study:

1. Are communication systems within institutions of higher education more formal or informal?
2. What was the extent of usage of the seven communication components utilized in institutions of higher education by the office of the dean?
3. Do faculties within institutions of higher education experience greater levels of satisfaction within communication systems characterized as formal or informal?
4. What level of satisfaction do faculties within institutions of higher education experience with respect to the seven communication components.

Limitations and Delimitations

This study was limited to faculty members of selected universities in the State of Oklahoma. The accuracy of the data was limited by the degree to which the faculties surveyed answered frankly and truthfully. Inferences from the findings of this study must be limited to the population studied.

Related Literature

Literature related to organizational communication was reviewed to develop a foundation upon which the study could be conducted. The review of the literature was divided into two sections, which were: (1) the topologies of organizational communication and (2) the affect of informal and formal communication on staff satisfaction within educational and non-educational organizations.

In section one, the literature that dealt with the aspects of

organizational communication was reviewed. Numerous researchers identified many functional and structural concepts of organizational communication. One such group of investigators, Farace, Monge, and Russell, synthesized all components of communication into the following seven: production, maintenance, innovation, flexibility, directionality, initiation, and types of message channels. The first three were functional, and the latter four were structural in nature.

A review of five organizational theories by Weber, Simon, Mayo, McGregor, and Likert was presented. Their theories added support and provided further explanation to the functional and structural components of organizational communication.

In section two, literature was cited which dealt with educational as well as non-educational institutions concerning the relationship between staff satisfaction and the formality of communication systems.

Methodology

The population for this study consisted of all faculty within ten colleges of four major universities in Oklahoma. Those Colleges were Education, Arts and Sciences, and Business at the University of Tulsa, Central State University, and Oklahoma State University. At the University of Oklahoma, only the College of Education participated in the study.

The instrument used to collect data for the study was a questionnaire developed by the cooperative effort of the Department of Educational Administration and the Interdepartment Committee on Research in Communication at Ohio State University but was modified by the researcher to fit the population being studied.

A pilot survey was conducted which resulted in minor changes and verification of the reliability of the instrument. Validity of the instrument was confirmed by a panel of experts from Oklahoma State University.

The revised questionnaires were distributed to 1,020 faculty members. Usable returns were obtained from 64.7 percent of the population.

Four primary questions concerning the study were posited. The first two were satisfied by using the Likert Scale Scoring Program to calculate the nature and the frequency of occurrence of the communication components utilized by the office of the dean.

The third question was answered by testing one major hypothesis and three minor hypotheses using the Likert Scale Scoring Program and the Scattergram subprogram of SPSS. One major hypothesis and three minor hypotheses were developed to provide an answer to the fourth primary question. Only one of the four null hypotheses was tested statistically utilizing a Two-Factor Mixed Design Analysis of Variance and the Newman-Keuls' Multiple-Range Test.

Findings

The findings are summarized below in relation to the primary questions.

Formality of the Communication System. (1) The overall communication system within institutions of higher education were slightly informal in nature.

(2) Only two of the seven components of communication could be

characterized as formal. They were the degree of flexibility and the types of message channels utilized within institutions of higher education. The other five components were found to be slightly informal in nature.

(3) Only the degree of flexibility and the types of message channels components were found to be formal in Colleges of Education. The other five components of communication were found to be informal.

(4) Maintenance, innovation, and the degree of flexibility components were characterized as being formal in nature in Colleges of Arts and Sciences. The other four components of communication were slightly informal.

(5) It was found that five of the seven communication components: production, maintenance, innovation, initiation, and directionality, were slightly informal in nature in Colleges of Business. The other two components of communication were formal.

Extent of Usage of the Seven Communication Components. Within all institutions of higher education it was found that production component occurred often and was the most utilized type of communication. The degree of flexibility component fell between the "often occurs" and the "sometimes occurs" responses and was the one component of communication least used by all colleges.

Level of Satisfaction Associated With the Formality of the Communication System. It was found that there were statistically significant relationships between the level of communication satisfaction experienced by faculties within all institutions of higher education and the formality of the communication utilized. The strongest

relationship between faculty satisfaction and the formality of the communication system was with the innovation component. The weakest relationship was with the degree of flexibility component.

Level of Satisfaction With Respect to the Seven Communication Components. (1) It was found that there were statistically significant relationships between the level of communication satisfaction experienced by faculties within all institutions of higher education with respect to the seven communication components.

(2) There were no statistically significant relationships among the Colleges of Education, Arts and Sciences, and Business with respect to the level of communication satisfaction experienced by the faculties and the communication systems utilized.

(3) The aggregate data of all colleges revealed significant relationships in all groups interactions with respect to the seven communication components.

Concluding Statements

Based on the findings, several conclusions seemed warranted. They are presented in this section as they were related to the four primary questions, formality of the communication system within institutions of higher education, the extent of usage of the seven components of communication, the level of satisfaction experienced by faculties with respect to the formality of the communication system, and the level of communication satisfaction experienced by communication components.

It was reported in the findings that the overall communication systems within institutions of higher education were more informal in

nature than formal. Thus, it can be concluded that deans and other college administrators could enhance the level of faculty satisfaction by developing and utilizing an informal type communication system.

College administrators need to be aware that although letters, notes, memoranda, and group meetings are necessary in the management process of the college, they have a tendency to produce dissatisfaction to faculty. Administrators should try to minimize the flow of paper messages and the number of group meetings. Personal contact with faculty by means of the telephone and face-to-face interactions would seem to lead to high levels of satisfaction.

Although production messages are necessary in order for a college to be operated effectively and efficiently, college administrators should be aware that these types of messages tend to produce low levels of faculty satisfaction. Thus, as opportunities arise, administrators should try to minimize production type messages whenever possible.

Within the informal communication system, innovation messages were correlated at a high level with faculty satisfaction. That suggest the necessity for a management strategy from the office of the dean that provides an opportunity for participation by the faculty in the generation of new ideas for improving and/or changing administrative practices or policies.

Of the seven components of communication, the degree of flexibility component contributed the least of any to faculty satisfaction. This phenomenon may reflect a need by the office of the dean to examine the flexibility of the communication system in his/her college and decrease rigidity wherever possible.

The results of the study revealed that maintenance messages which

dealt with work pressure were negatively related to faculty satisfaction. This implied that when professors perceive a situation which demands extra time and effort, it was often accompanied by lower faculty satisfaction. Consequently, as these situations arise, college administrators need to decrease other work demands or, at least, increase incentives such as recognition of accomplishments, to counteract decreased faculty satisfaction levels.

The deliberate structuring of the communication system by a dean might have important implications for the mental health of individuals in institutions of higher education. Such structuring could also lead to the development of sound management policies and procedures.

Because this study was limited to faculty members per se within institutions of higher education, different findings might have been produced if administrators such as department heads, coordinators, directors, and/or assistant or associate deans had been studied separately. On the assumption that their needs are different from those of faculty members, it is recommended that this study be replicated with that population.

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APPENDIX A

QUESTIONNAIRE AND COVER LETTER

COMMUNICATION QUESTIONNAIRE

Introduction: This questionnaire has been prepared in an effort to identify the organizational communication in your college and your satisfaction level of that behavior. The items in the questionnaire portray typical behaviors or conditions that occur in a college organization. The writer does not need to know your name, so to protect your anonymity, please return the instrument unsigned to the writer.

The expression "office of the dean" is a generic expression used to refer to any personnel who are in a position to represent that office. This would include such personnel as the Dean, Associate Dean, Assistant Dean, Administrative Assistants, and all faculty and staff associated with the office of the dean.

Instructions: Please indicate the frequency of occurrence of each behavior by CIRCLING the appropriate numeral. Then, based on your rating, circle your level of satisfaction with the nature and frequency of that behavior. The possible choices are as follows:

BEHAVIORAL CHARACTERISTICS	FREQUENCY OF OCCURRENCE				SATISFACTION LEVEL			
	Very Frequently Occurs	Often Occurs	Sometimes Occurs	Rarely Occurs	Always Satisfied	Often Satisfied	Sometimes Satisfied	Rarely Satisfied
1. The office of the dean works toward the achievement of college goals and objectives.	1	2	3	4	A	B	C	D
2. The office of the dean provides faculty members with decreased work loads in order to encourage professional development.	1	2	3	4	A	B	C	D
3. When normal communications between the office of the dean and the faculty are temporarily blocked, alternate channels of communication are available.	1	2	3	4	A	B	C	D
4. The directionality of message flow follows the classic "command-and-report" sequence in which orders or commands emanate from the office of the dean and reports of compliance with the orders are returned to that office.	1	2	3	4	A	B	C	D
5. The office of the dean permits faculty members to submit reports and assignments at their convenience.	1	2	3	4	A	B	C	D
6. The office of the dean generally uses daily face-to-face contact rather than the telephone or memorandum communication as a means of interacting with the faculty.	1	2	3	4	A	B	C	D
7. The office of the dean maintains an environment where faculty members interact with one another easily.	1	2	3	4	A	B	C	D
8. The office of the dean shows clearly the reasons for its new administrative decisions and policies.	1	2	3	4	A	B	C	D
9. The office of the dean provides effective channels for horizontal or peer communication among faculty members.	1	2	3	4	A	B	C	D

	FREQUENCY OF OCCURRENCE				SATISFACTION LEVEL			
	Very Frequently Occurs	Often Occurs	Sometimes Occurs	Rarely Occurs	Always Satisfied	Often Satisfied	Sometimes Satisfied	Rarely Satisfied
10. Message initiation between the office of the dean and the faculty generally originates with the office of the dean.	1	2	3	4	A	B	C	D
11. The office of the dean generally uses letters, notes, and memorandums rather than the telephone or face-to-face communication as a means of interacting with the faculty.	1	2	3	4	A	B	C	D
12. The office of the dean provides a faculty member a sufficient amount of time to complete specific assignments related to his or her expertise.	1	2	3	4	A	B	C	D
13. The office of the dean encourages each faculty member to identify him or herself with the administrative policies and procedures of the college.	1	2	3	4	A	B	C	D
14. Faculty communication with the office of the dean follows strict vertical channels with little flexibility.	1	2	3	4	A	B	C	D
15. The office of the dean acts on suggestions and recommendations from the faculty as quickly as possible.	1	2	3	4	A	B	C	D
16. The office of the dean encourages the initiation of messages from the faculty concerning any subject matter.	1	2	3	4	A	B	C	D
17. Group meetings and committee work are used by the office of the dean as communication instruments.	1	2	3	4	A	B	C	D
18. The office of the dean generally overloads faculty members with conferences, committees, and other extra-curricular work.	1	2	3	4	A	B	C	D
19. Rewards are given to faculty members whose personal goals coincide with the goals of the office of the dean.	1	2	3	4	A	B	C	D
20. The office of the dean encourages faculty involvement with the implementation of new ideas and suggestions.	1	2	3	4	A	B	C	D
21. The office of the dean provides effective channels for expression of grievances.	1	2	3	4	A	B	C	D
22. The office of the dean generally uses the telephone rather than memorandum or face-to-face communication as a means of interacting with the faculty.	1	2	3	4	A	B	C	D
23. The office of the dean takes the time to locate or correct problems in its communication with faculty.	1	2	3	4	A	B	C	D
24. The office of the dean systematically develops and maintains a pleasing environment which helps facilitate communications within the college.	1	2	3	4	A	B	C	D
25. The office of the dean encourages the generation of new ideas for improving and/or changing administrative practices or policies.	1	2	3	4	A	B	C	D

Thank you for completing this instrument. Please send results to:

Ron Area
103 Gundersen Hall
Oklahoma State University
Stillwater, Oklahoma 74074

Oklahoma State University

COLLEGE OF EDUCATION

STILLWATER, OKLAHOMA 74074
GUNDERSEN HALL
(405) 624-6346

December 1, 1977

TO: Faculty Members
College of Arts & Sciences

FROM: Ron Area
College of Education

SUBJ: Communication Survey

Dean Gries has graciously consented to cooperate with me in the distribution of an instrument for my dissertation that will make it possible to identify the kinds of organizational communication in colleges and their affect on faculty satisfaction.

Will you please contribute 15 minutes of your time by completing the two attached questionnaires and return them to me in the enclosed self-addressed envelope? A copy of the summarized results will be made available to you after May, 1978, upon request.

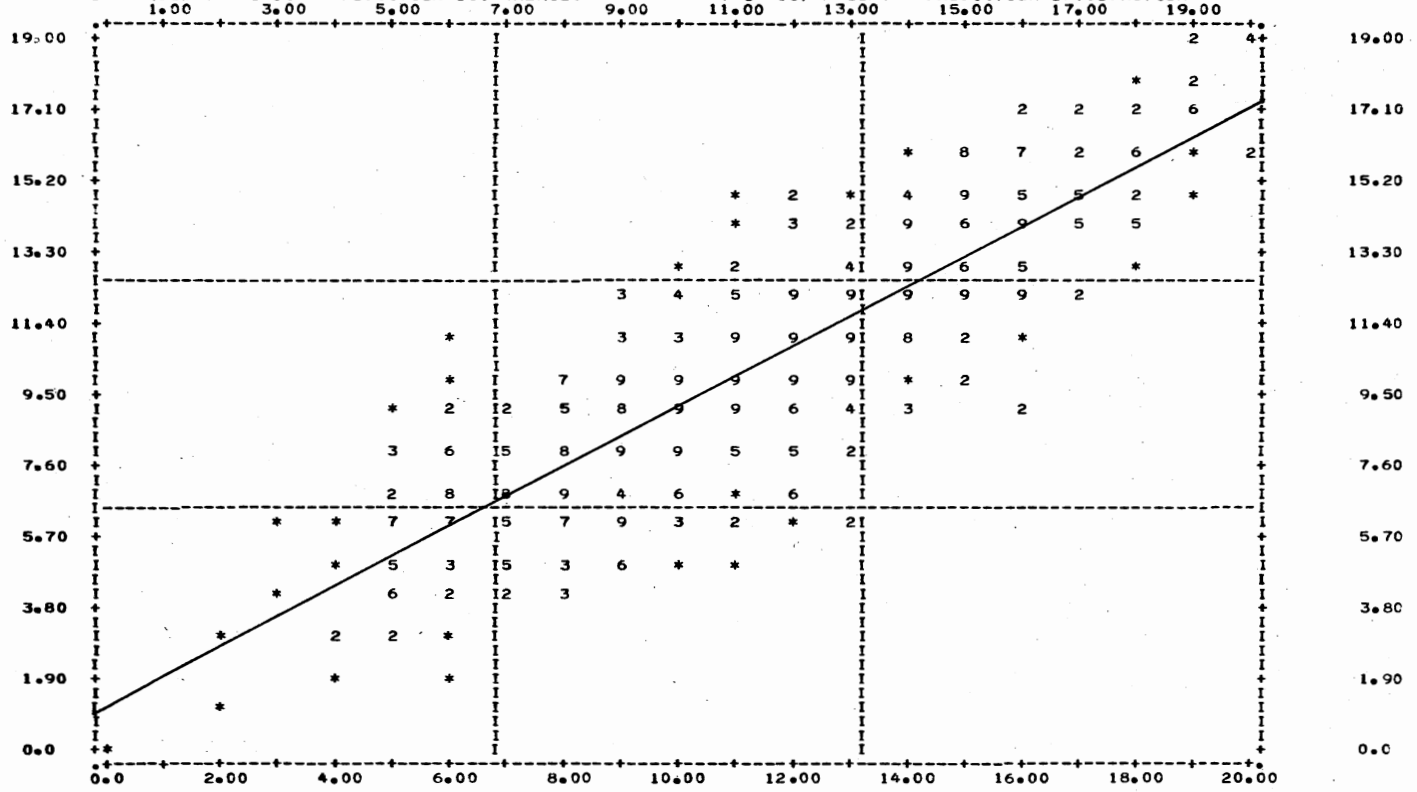
Thanks very much for your cooperation.

Attachments

APPENDIX B

SCATTERGRAMS OF THE RELATIONSHIP BETWEEN FACULTY SATISFACTION AND THE FORMALITY OF THE COMMUNICATION SYSTEM

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) PRODUC PRODUCTION OCCURRENCES (ACROSS) PROSAT PRODUCTION SATISFACTION

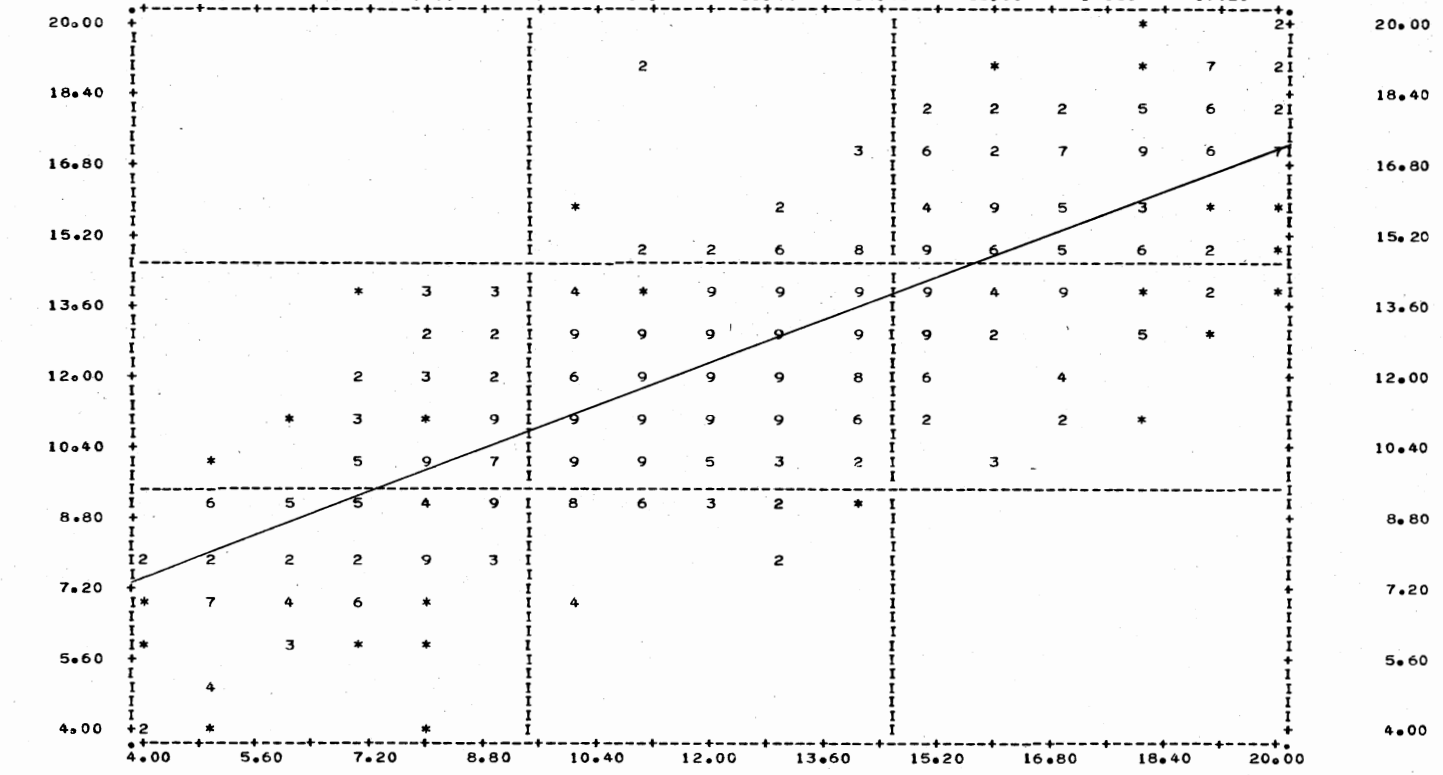


STATISTICS..

CORRELATION (R)-	0.86217	R SQUARED -	0.74334	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.73126	INTERCEPT (A) -	1.04856	SLOPE (B) -	0.80379
PLOTTED VALUES -	660	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) MAINTN MAINTENANCE OCCURRENCES (ACROSS) MAINST MAINTENANCE SATISFACTION

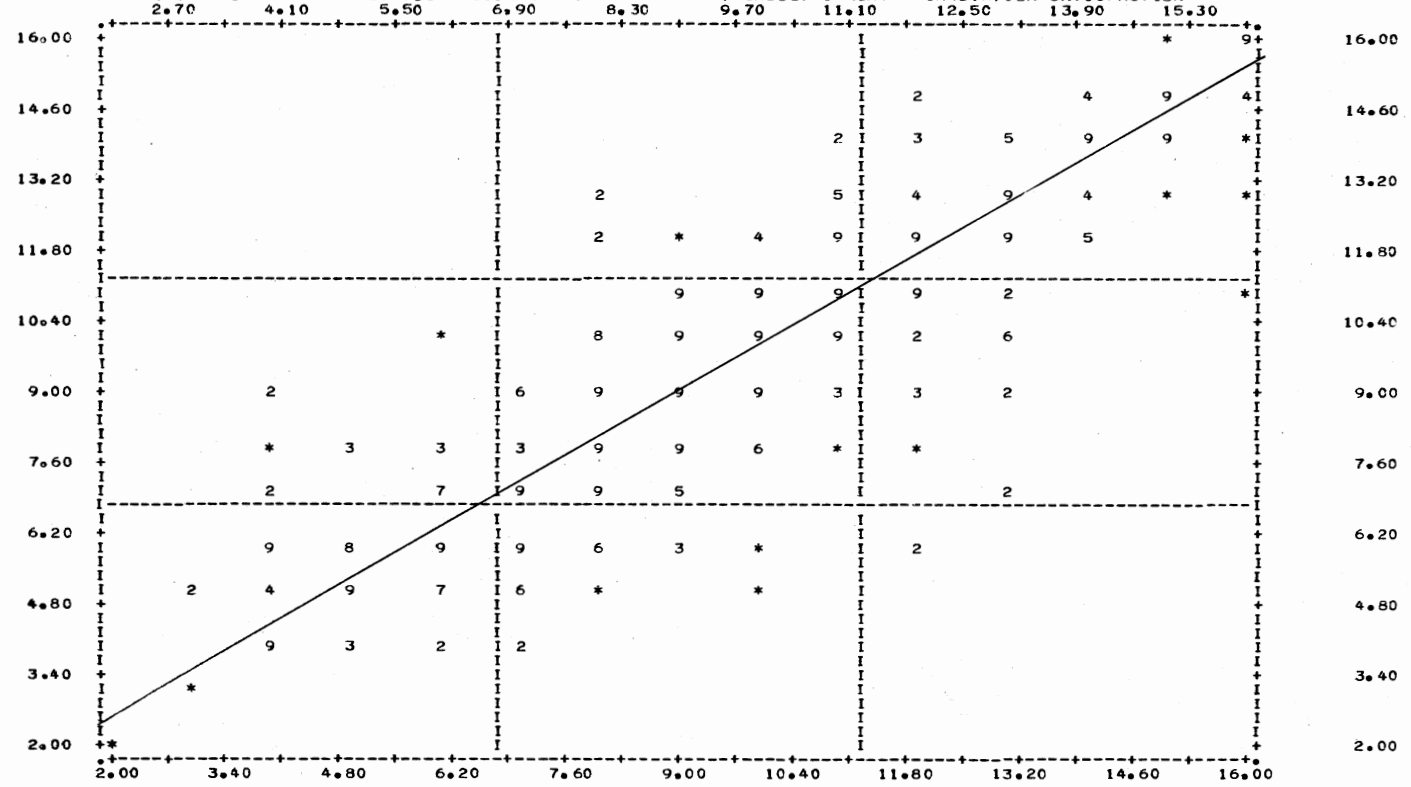


STATISTICS..

CORRELATION (R)-	0.80525	R SQUARED -	0.64842	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.80736	INTERCEPT (A) -	4.30242	SLOPE (B) -	0.65249
PLOTTED VALUES -	660	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) INNOVT INNOVATION OCCURRENCES (ACROSS) INNSAT INNOVATION SATISFACTION

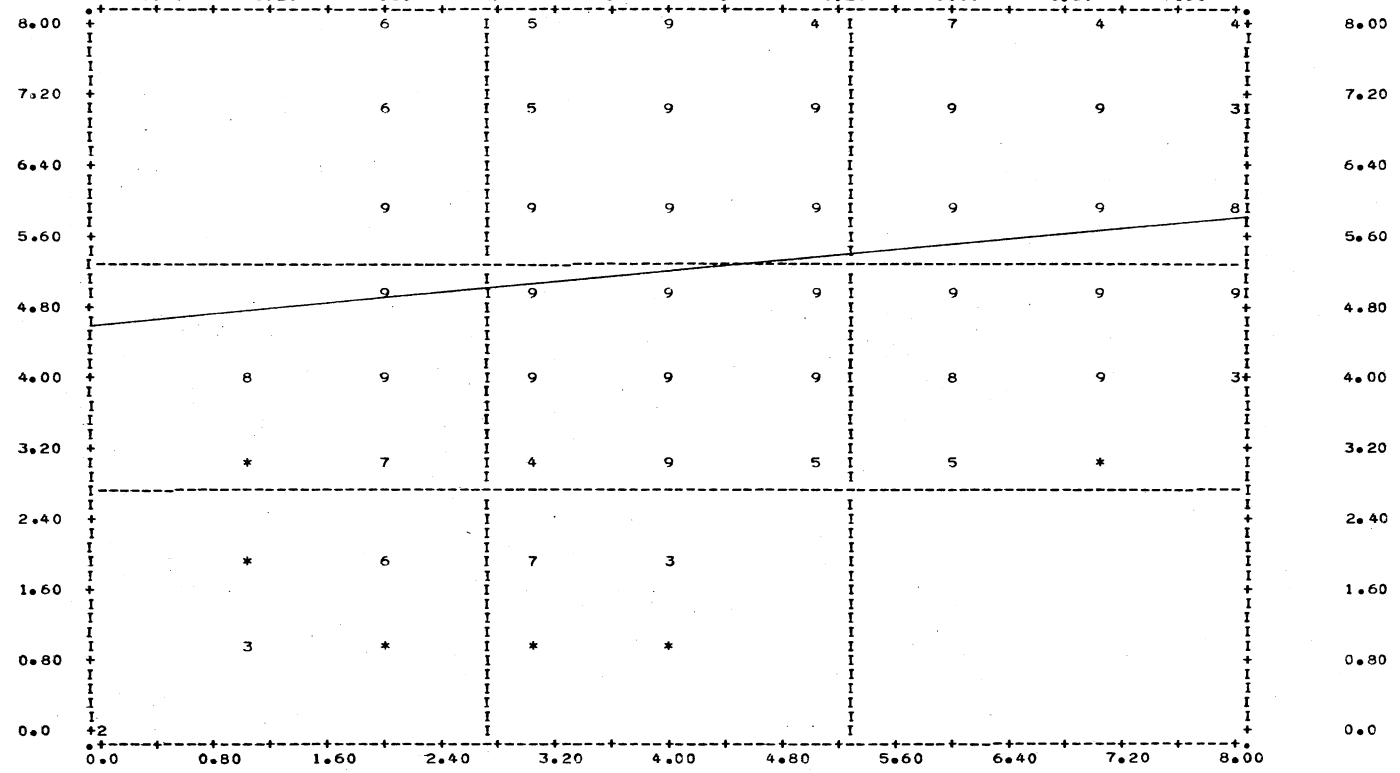


STATISTICS..

CORRELATION (R)-	0.91874	R SQUARED -	0.84408	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.32114	INTERCEPT (A) -	0.90731	SLOPE (B) -	0.89961
PLOTTED VALUES -	660	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) FLEXIB FLEXIBILITY OCCURRENCES (ACROSS) FLESAT FLEXIBILITY SATISFACTION

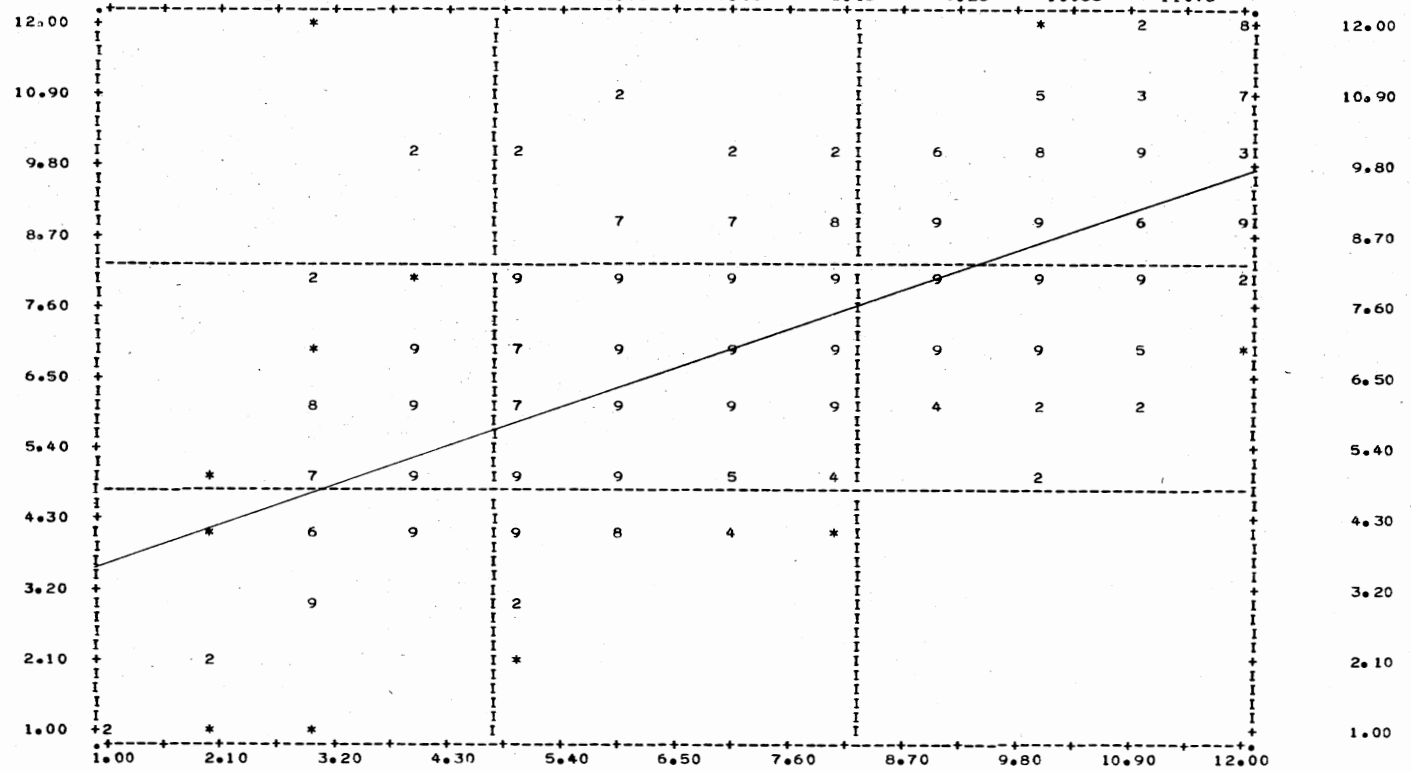


STATISTICS..

CORRELATION (R)-	0.20577	R SQUARED -	0.04234	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.41735	INTERCEPT (A) -	4.55671	SLOPE (B) -	0.16312
PLOTTED VALUES -	660	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) DIRECT DIRECTIONALITY OCCURRENCES (ACROSS) DIRSAT DIRECTIONALITY SATISFACTION



STATISTICS..

CORRELATION (R)-	0.69657	R SQUARED -	0.48521	SIGNIFICANCE -	0.00001
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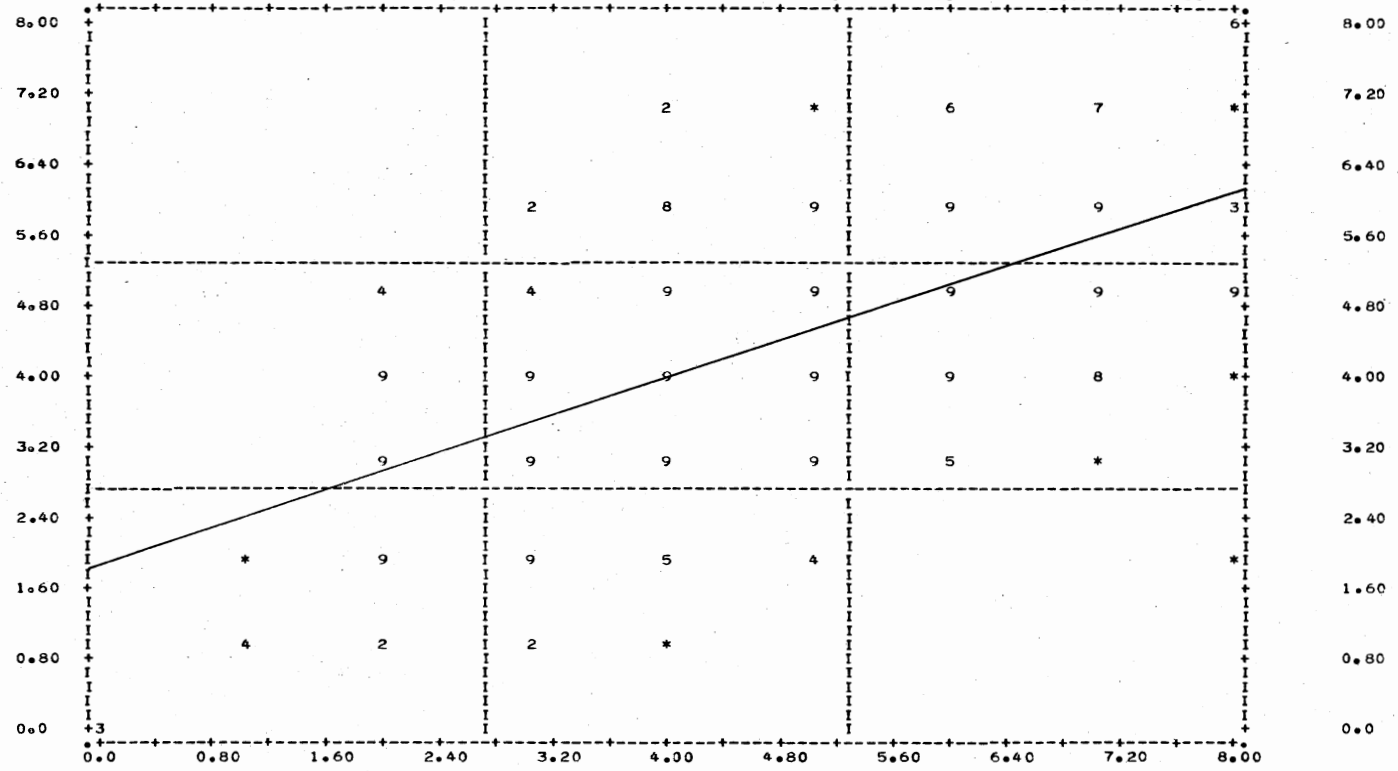
PLOTTED VALUES -	660	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) INITIA INITIATION OCCURRENCES (ACROSS) INITST INITIATION SATISFACTION

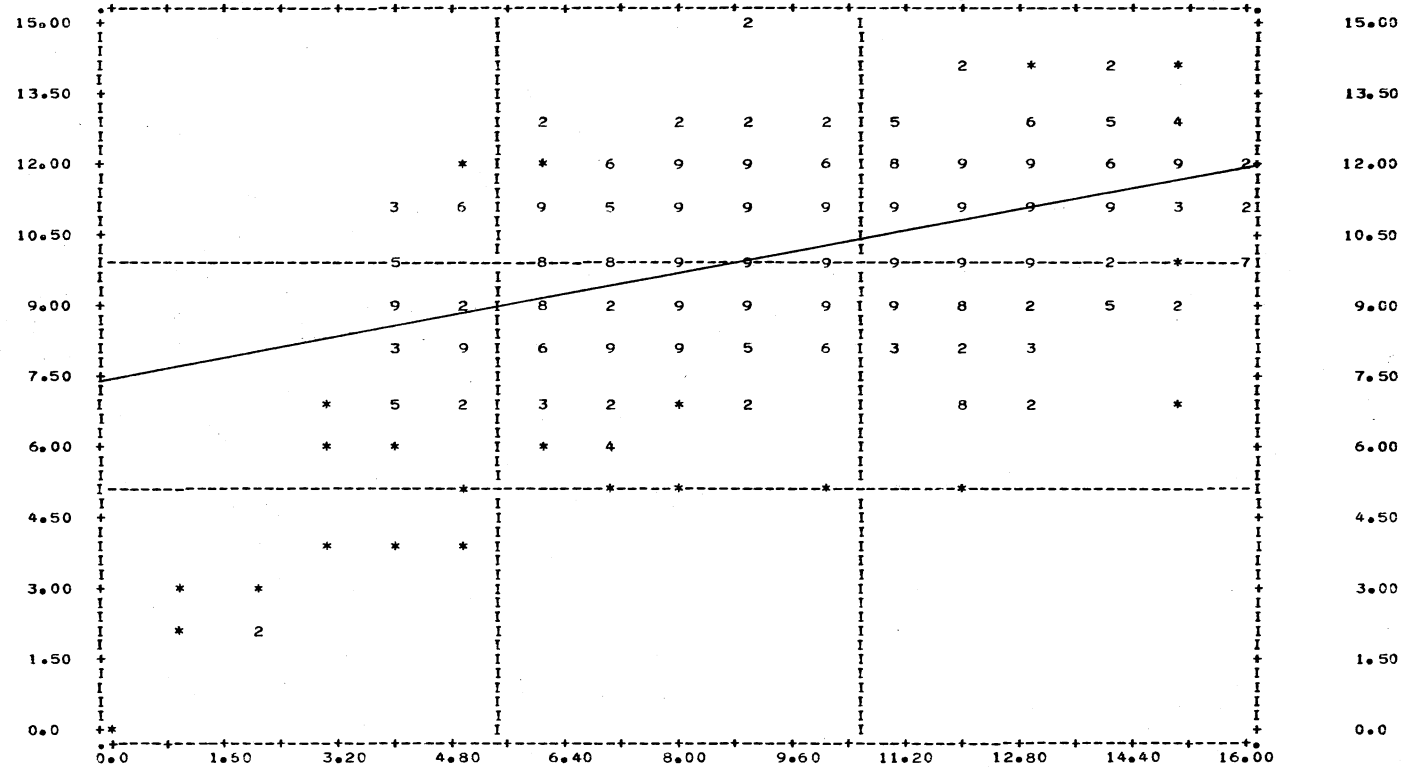


STATISTICS..

CORRELATION (R)-	0.65333	R SQUARED -	0.42684	SIGNIFICANCE -	0.00001
STD ERR OF EST -	0.99515	INTERCEPT (A) -	1.79023	SLOPE (B) -	0.53421
PLOTTED VALUES -	660	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) TYPE OF MESSAGES OCCURRENC (ACROSS) TYST TYPE OF MESSAGES - SATISFACTION

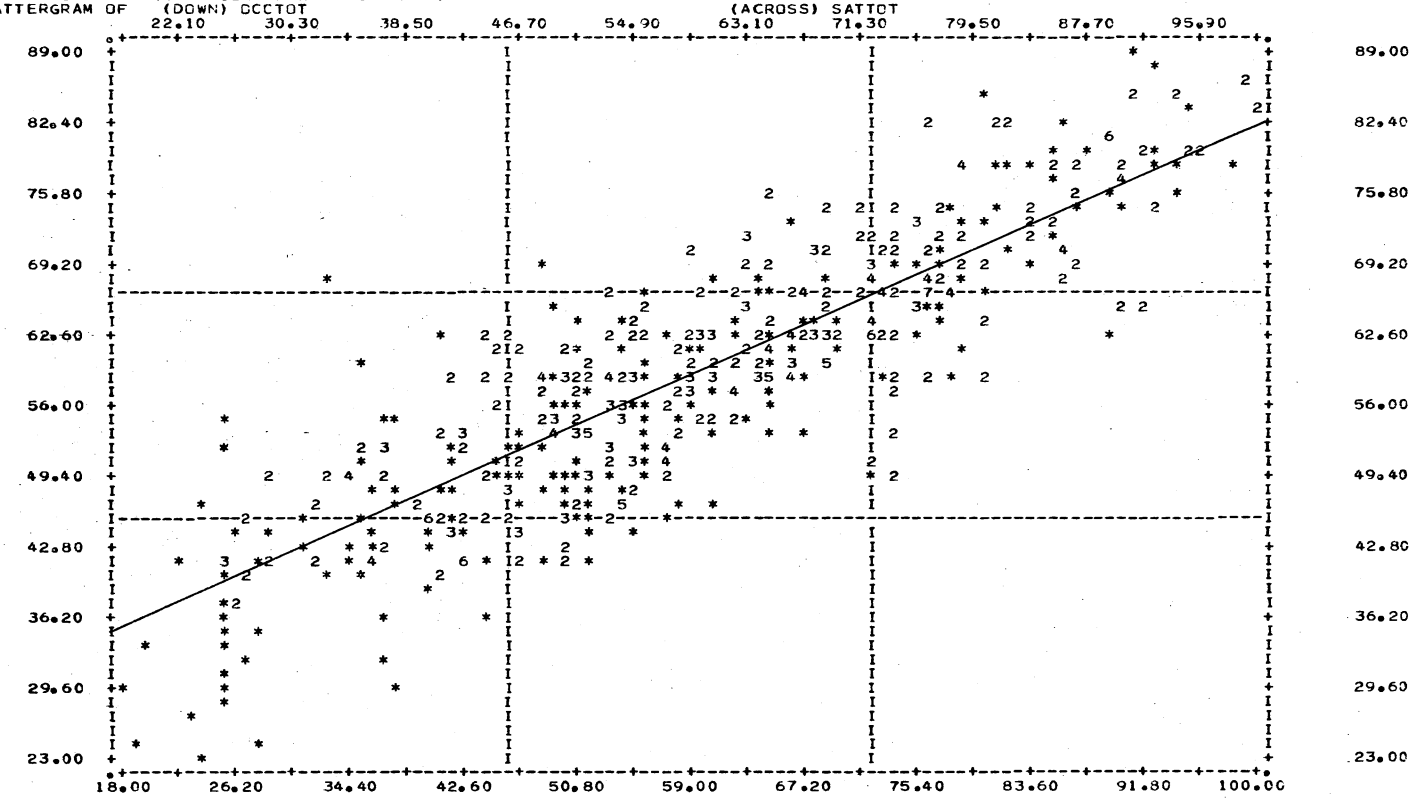


STATISTICS..

CORRELATION (R)-	0.45300	R SQUARED -	0.20521	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.66817	INTERCEPT (A) -	7.37004	SLOPE (B) -	0.27415
PLOTTED VALUES -	660	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) QCCTOT (ACROSS) SATTOT



STATISTICS..

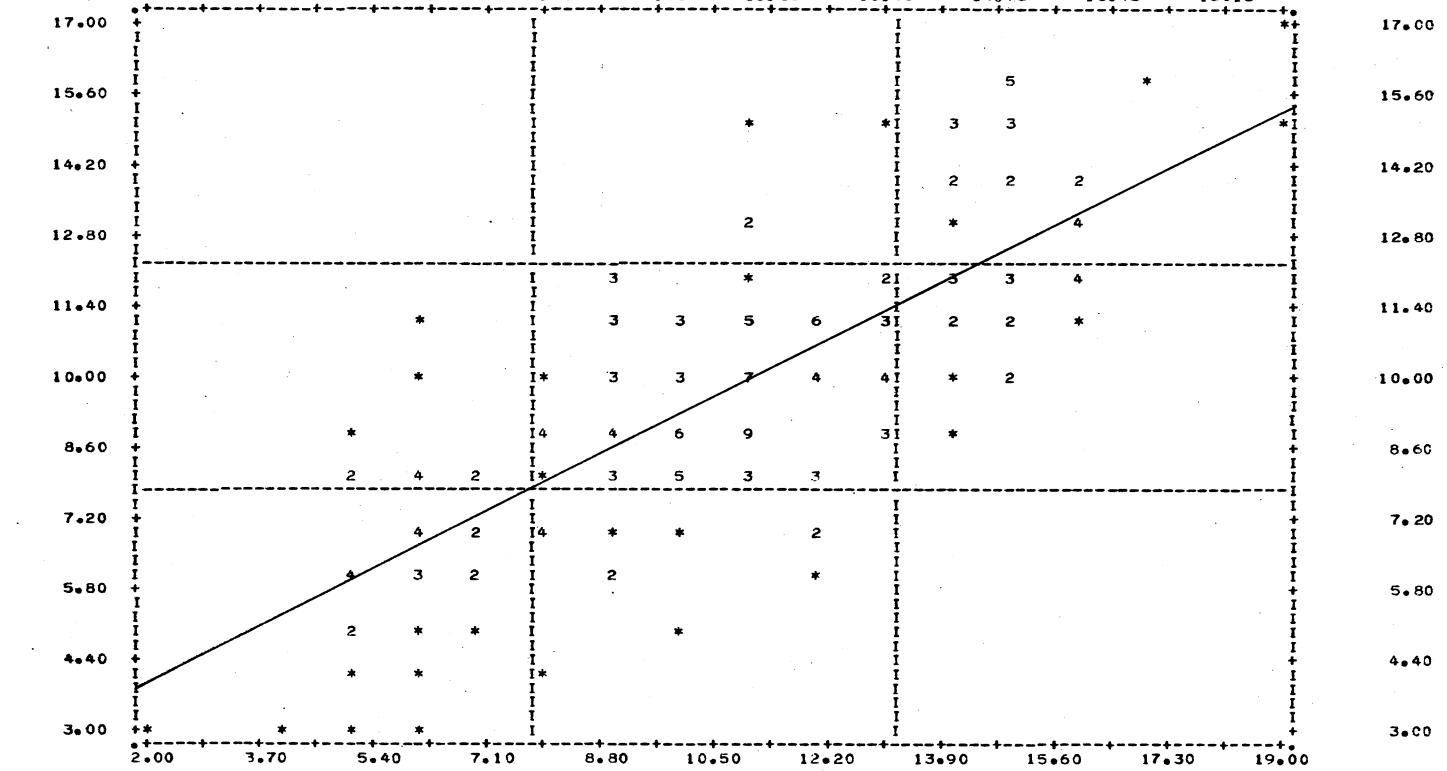
CORRELATION (R) -	0.85990	R SQUARED -	0.73943	SIGNIFICANCE -	0.00001
STD ERR OF EST -	6.08798	INTERCEPT (A) -	24.06978	SLOPE (B) -	0.58373
PLOTTED VALUES -	660	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

APPENDIX C

SCATTERGRAMS OF THE RELATIONSHIP BETWEEN FACULTY SATISFACTION AND THE FORMALITY OF THE COMMUNICATION SYSTEM FOR COLLEGES OF EDUCATION

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) PRODUC PRODUCTION OCCURRENCES (ACROSS) PROSAT PRODUCTION SATISFACTION

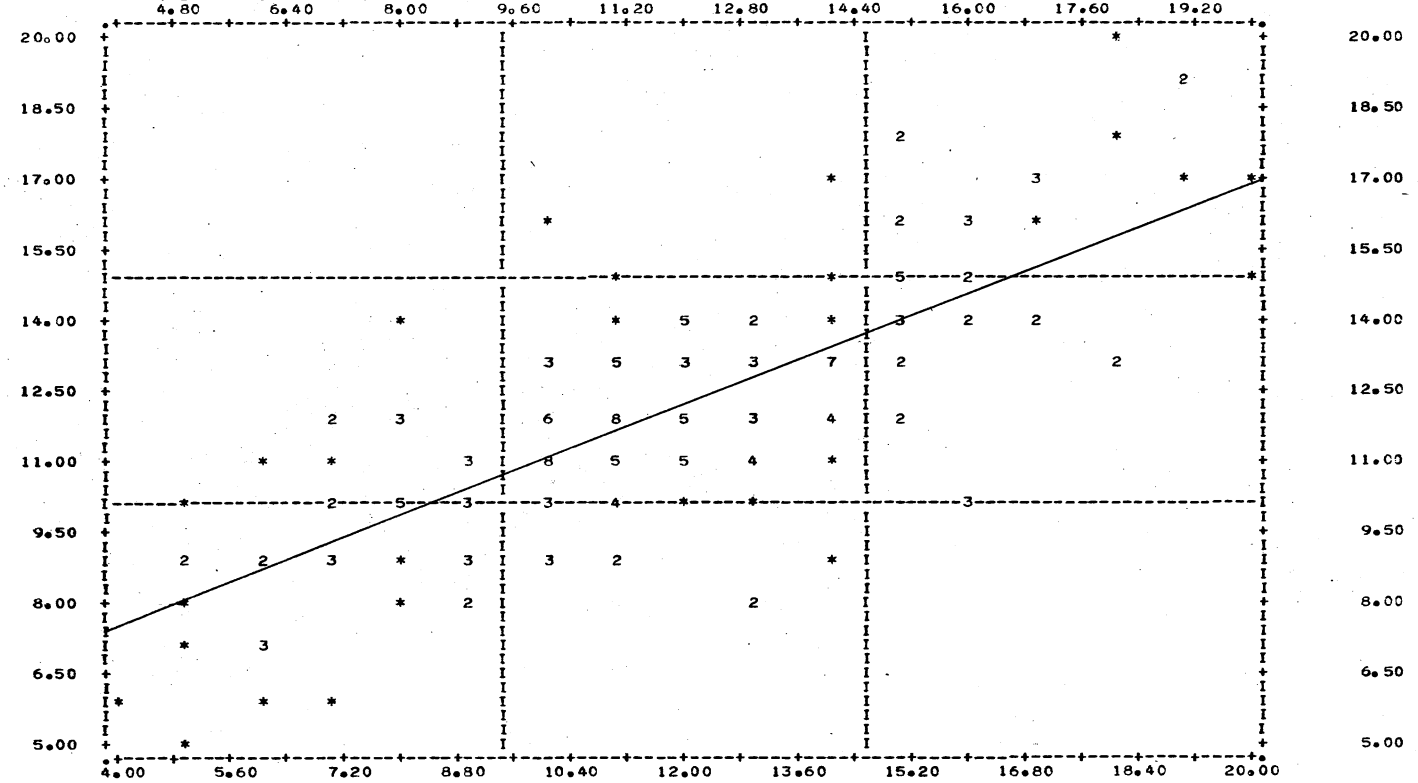


STATISTICS..

CORRELATION (R)-	0.78722	R SQUARED -	0.61971	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.81597	INTERCEPT (A) -	2.43601	SLOPE (B) -	0.68419
PLOTTED VALUES -	186	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) MAINTN MAINTENANCE OCCURRENCES (ACROSS) MAINST MAINTENANCE SATISFACTION

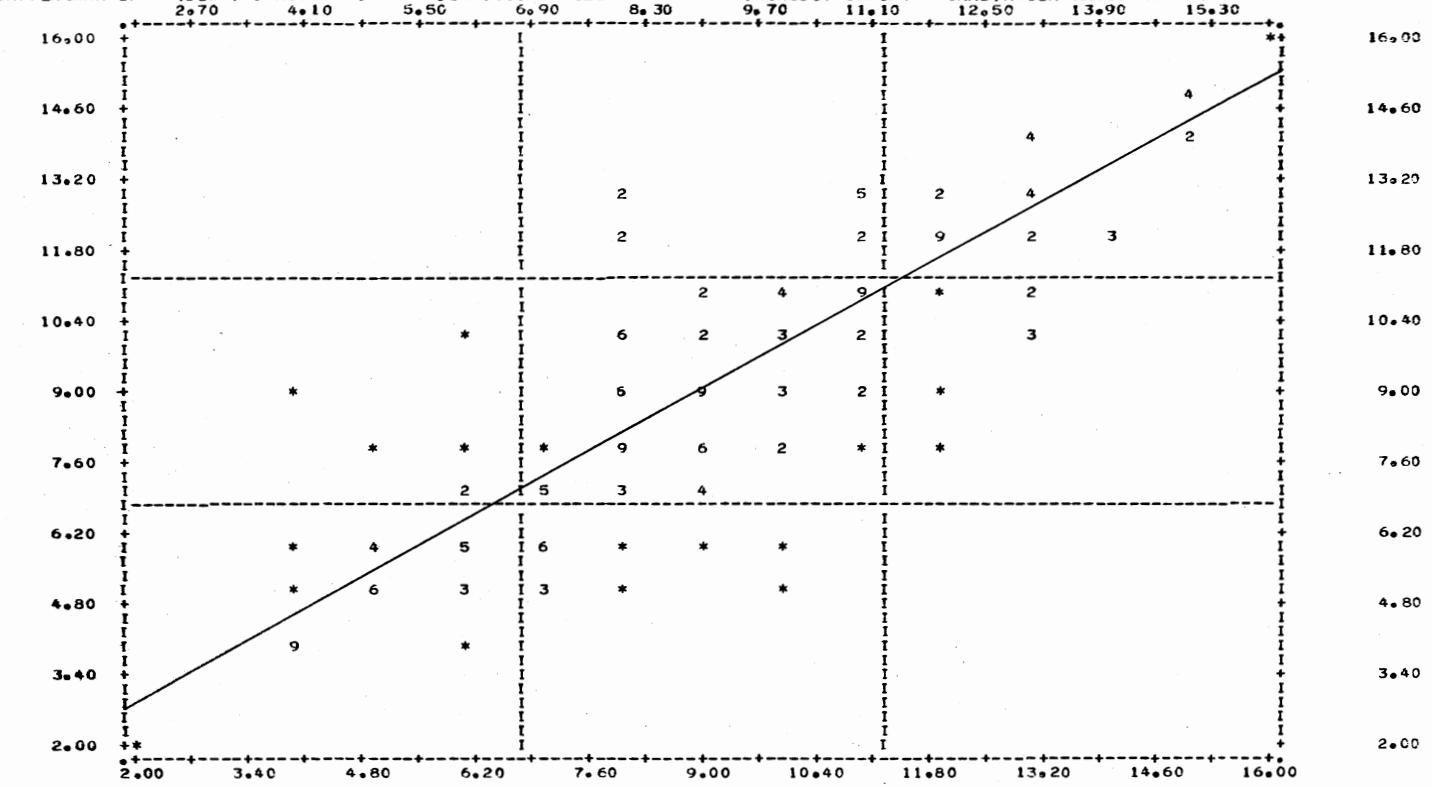


STATISTICS..

CORRELATION (R)-	0.75197	R SQUARED -	0.56546	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.77941	INTERCEPT (A) -	5.05584	SLOPE (B) -	0.59199
PLOTTED VALUES -	186	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) INNOVT INNOVATION OCCURRENCES (ACROSS) INNSAT INNOVATION SATISFACTION

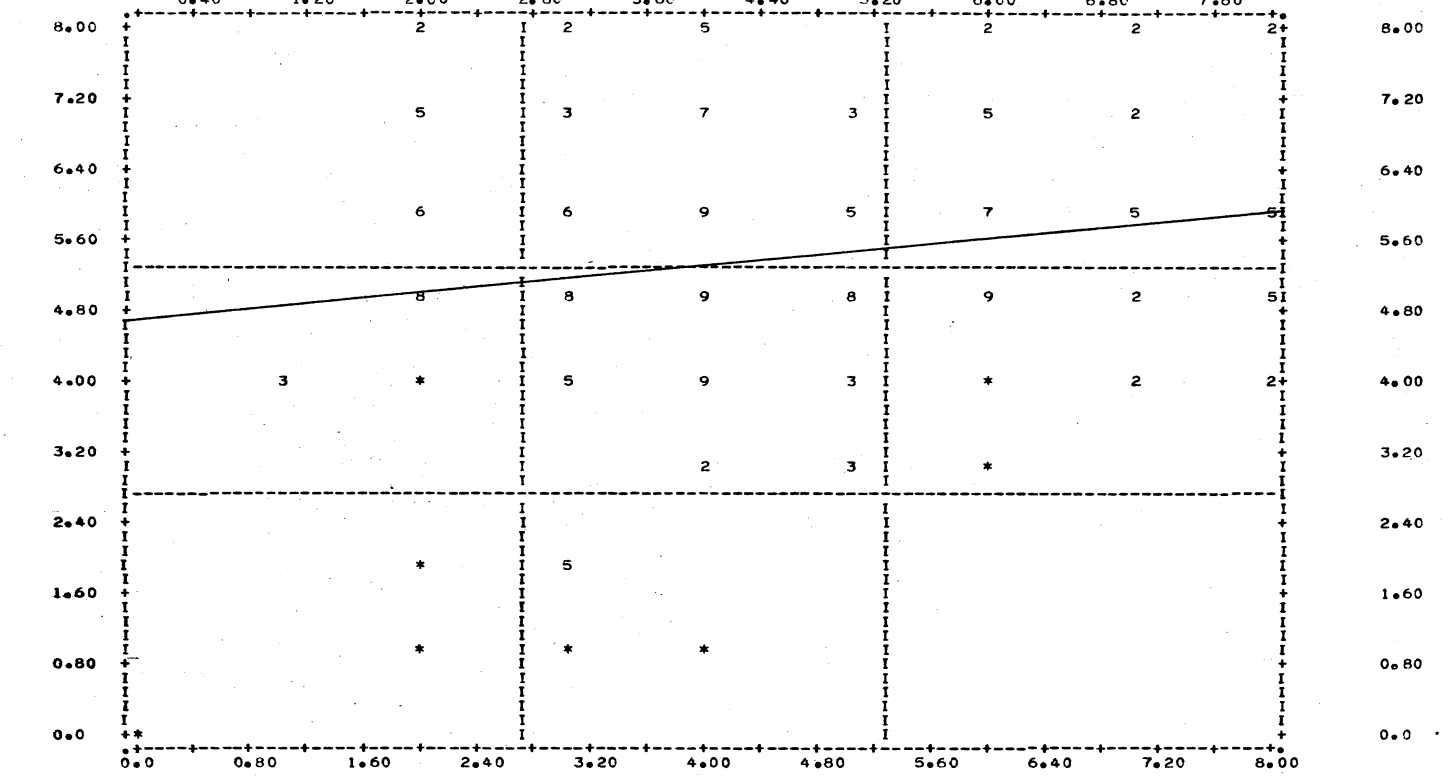


STATISTICS..

CORRELATION (R)-	0.86891	R SQUARED -	0.75500	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.50498	INTERCEPT (A) -	0.99684	SLOPE (B) -	0.88263
PLOTTED VALUES -	186	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) FLEXIB FLEXIBILITY OCCURRENCES (ACROSS) FLESAT FLEXIBILITY SATISFACTION

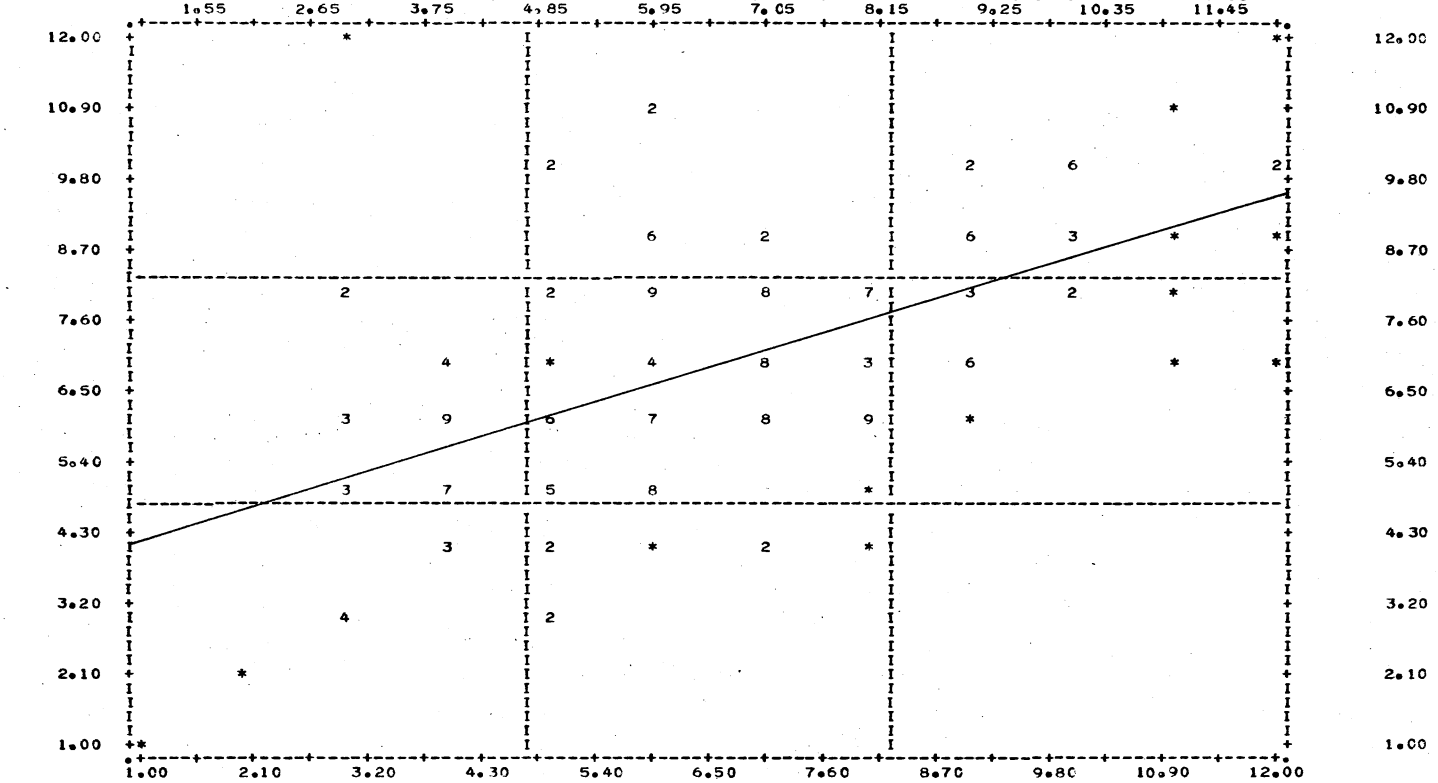


STATISTICS..

CORRELATION (R)-	0.18685	R SQUARED -	0.03491	SIGNIFICANCE -	0.00533
STD ERR OF EST -	1.51272	INTERCEPT (A) -	4.64688	SLOPE (B) -	0.15859
PLOTTED VALUES -	186	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) DIRECT DIRECTIONALITY OCCURRENCES (ACROSS) DIRSAT DIRECTIONALITY SATISFACTION

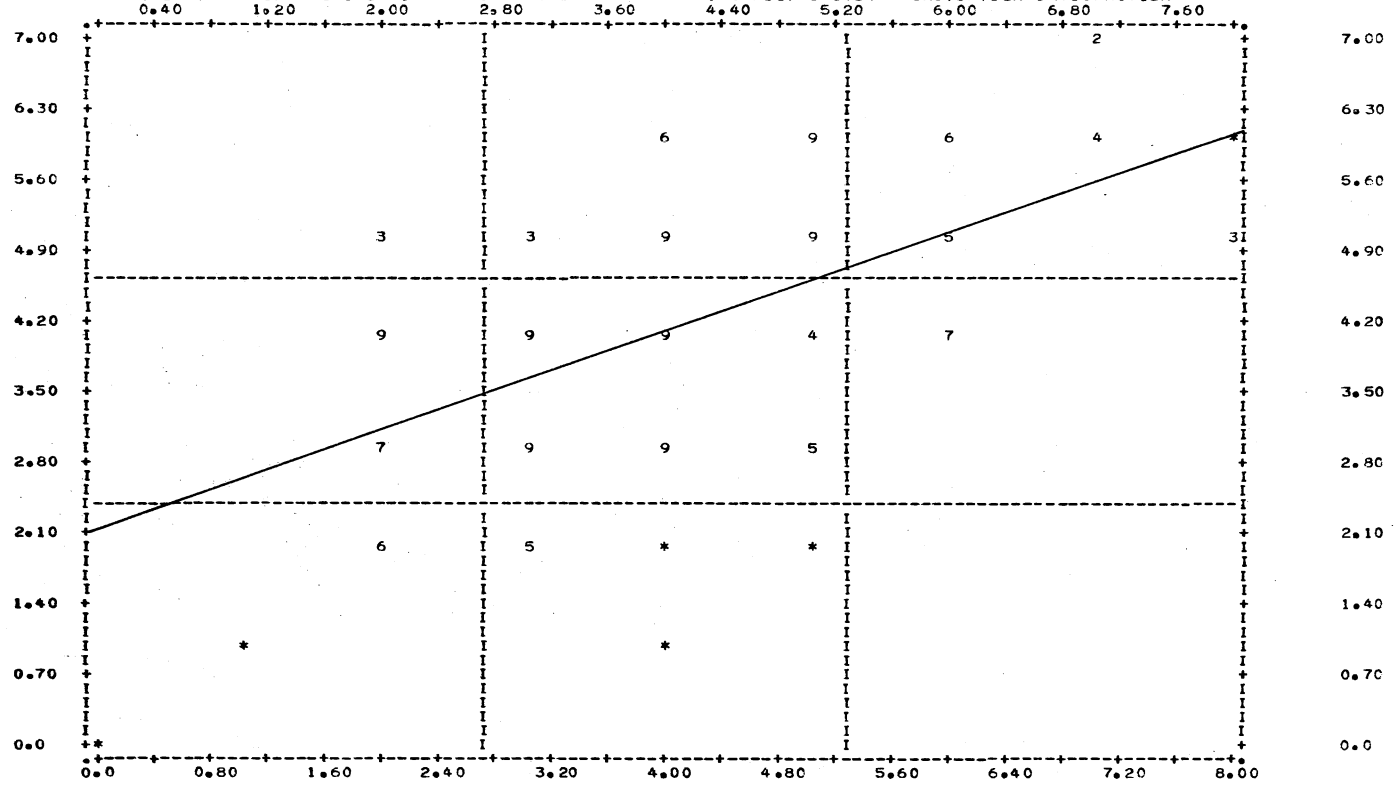


STATISTICS..

CORRELATION (R)-	0.57241	R SQUARED -	0.32765	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.59318	INTERCEPT (A) -	3.67863	SLOPE (B) -	0.48996
PLOTTED VALUES -	186	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) INITIA INITIATION OCCURRENCES (ACROSS) INITST INITIATION SATISFACTION

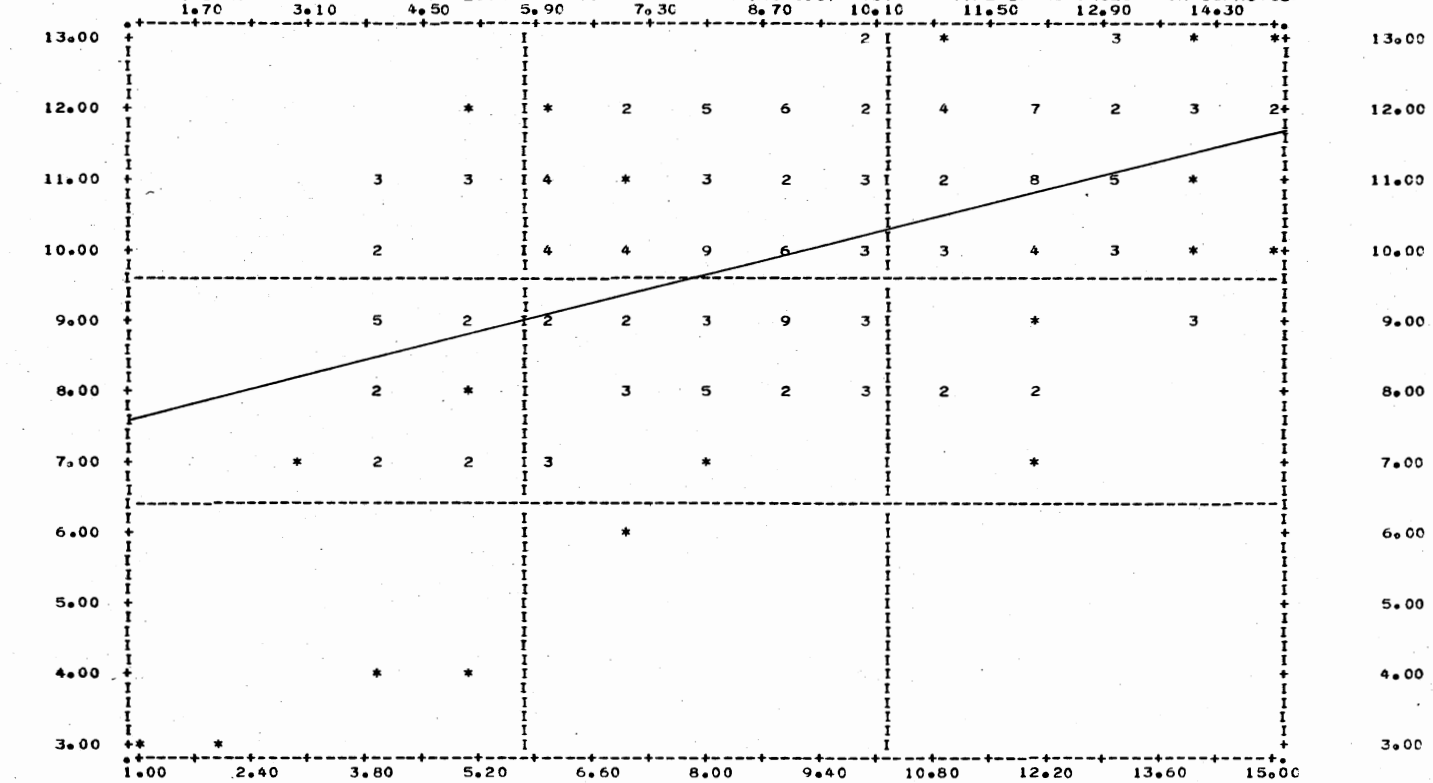


STATISTICS..

CORRELATION (R)-	0.58137	R SQUARED -	0.33799	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.00839	INTERCEPT (A) -	2.10590	SLOPE (B) -	0.49304
PLOTTED VALUES -	186	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) TYPE OF MESSAGES OCCURRENC (ACROSS) TYST TYPE OF MESSAGES - SATISFACTION

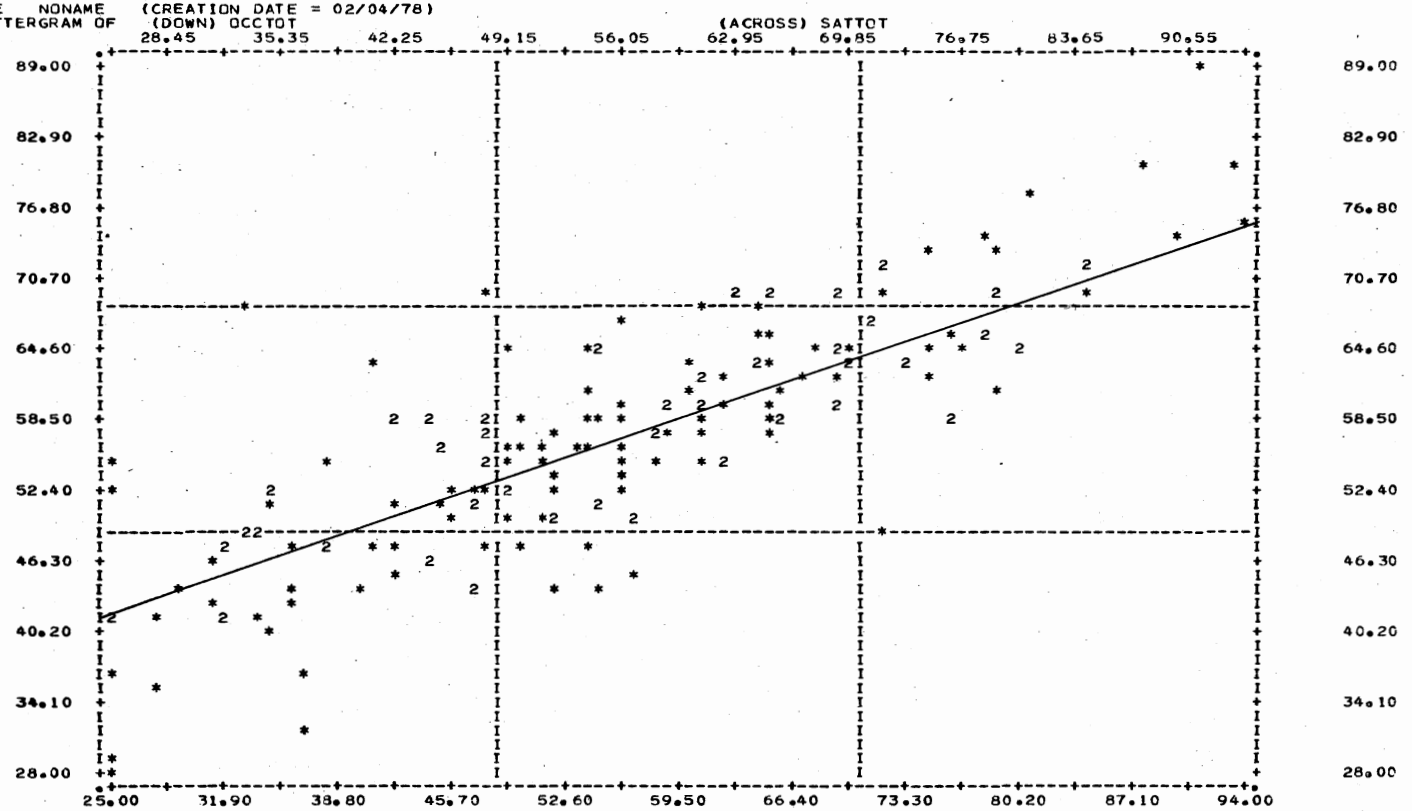


STATISTICS..

CORRELATION (R) -	0.47799	R SQUARED -	0.22848	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.63168	INTERCEPT (A) -	7.38446	SLOPE (B) -	0.28900
PLOTTED VALUES -	186	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) OCCTOT (ACROSS) SATTOT



STATISTICS..

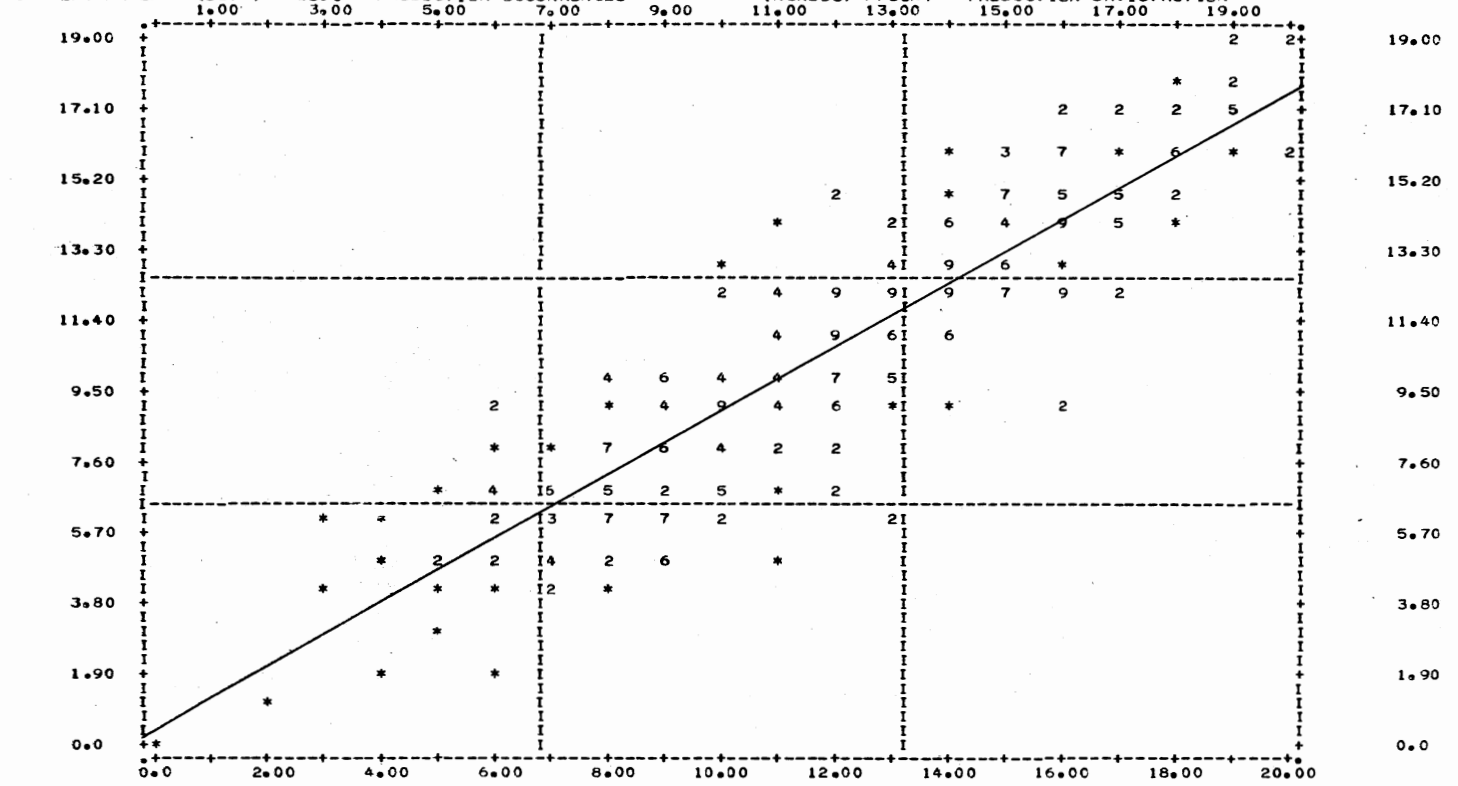
CORRELATION (R)-	0.81401	R SQUARED -	0.66261	SIGNIFICANCE -	0.00001
STD ERR OF EST -	5.83313	INTERCEPT (A) -	28.62729	SLOPE (B) -	0.51165
PLOTTED VALUES -	186	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

APPENDIX D

SCATTERGRAMS OF THE RELATIONSHIP BETWEEN FACULTY SATISFACTION AND THE FORMALITY OF THE COMMUNICATION SYSTEM FOR COLLEGES OF ARTS AND SCIENCES

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) PRODUC PRODUCTION OCCURRENCES (ACROSS) PROSAT PRODUCTION SATISFACTION

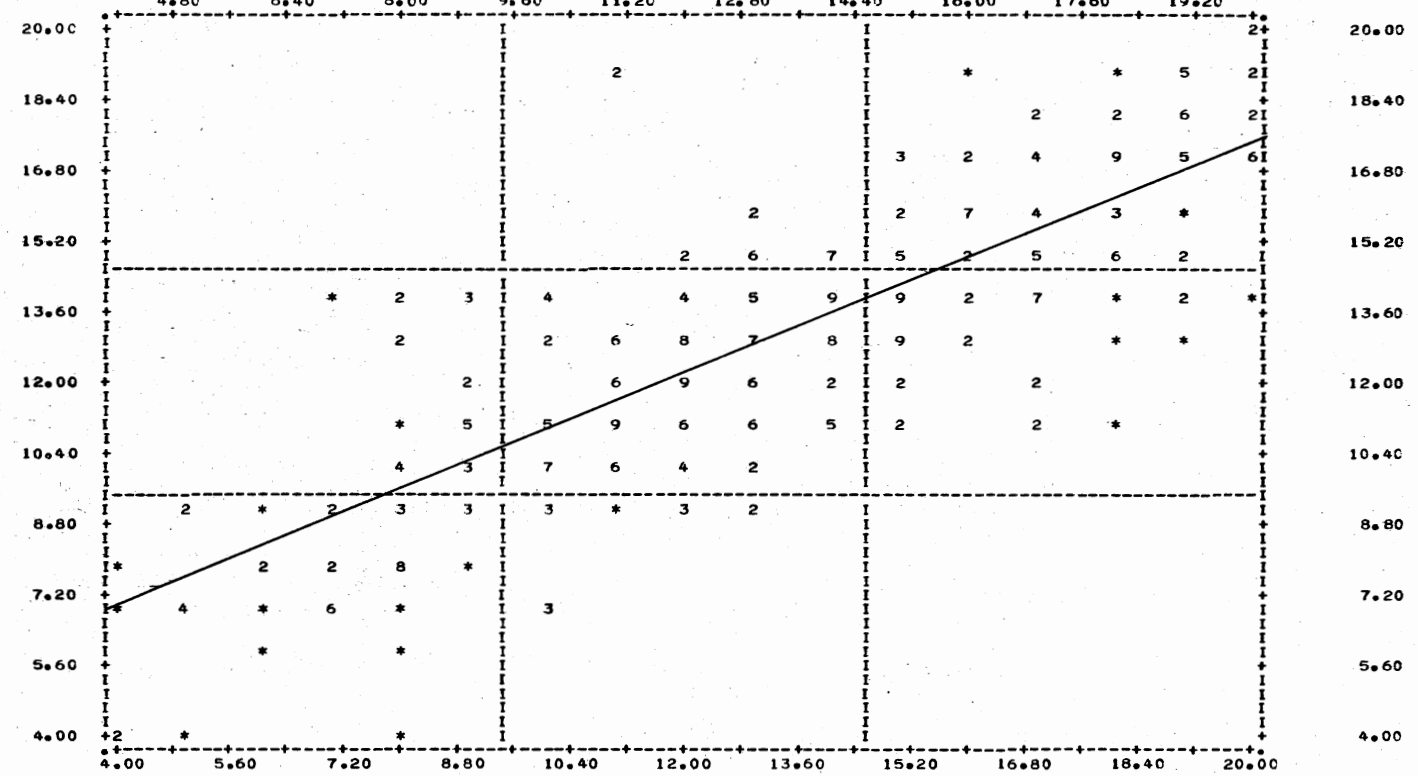


STATISTICS..

CORRELATION (R)-	0.89140	R SQUARED -	0.79459	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.65400	INTERCEPT (A) -	0.23264	SLOPE (B) -	0.86868
PLOTTED VALUES -	370	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) MAINTN MAINTENANCE OCCURRENCES (ACROSS) MAINST MAINTENANCE SATISFACTION



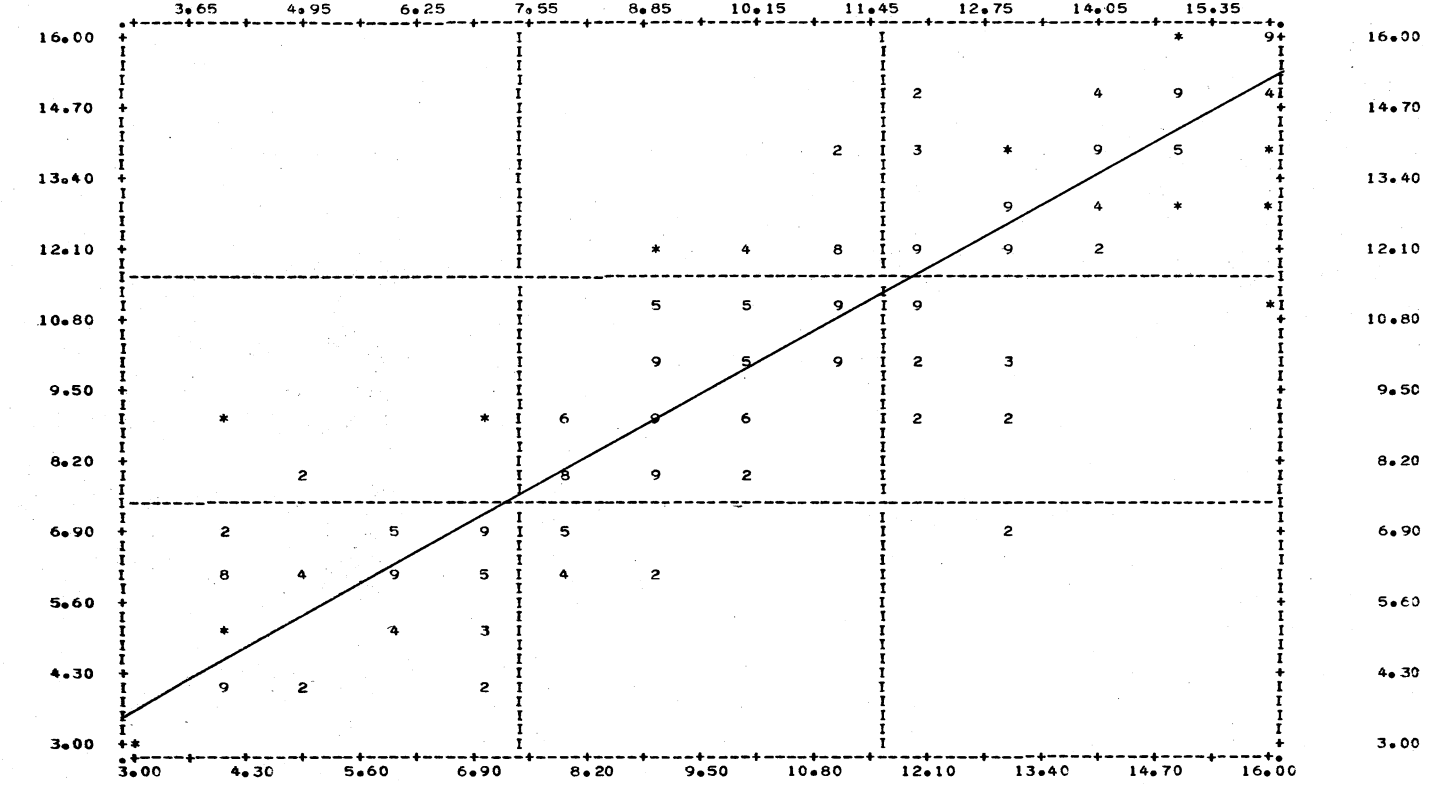
STATISTICS..

CORRELATION (R)-	0.82282	R SQUARED -	0.67704	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.81950	INTERCEPT (A) -	3.86846	SLOPE (B) -	0.68347
PLOTTED VALUES -	370	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

COMPARISON BY COLLEGE TYPE-ARTS AND SCIENCES 02/04/78 PAGE 6

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) INNOVT INNOVATION OCCURRENCES (ACROSS) INNSAT INNOVATION SATISFACTION



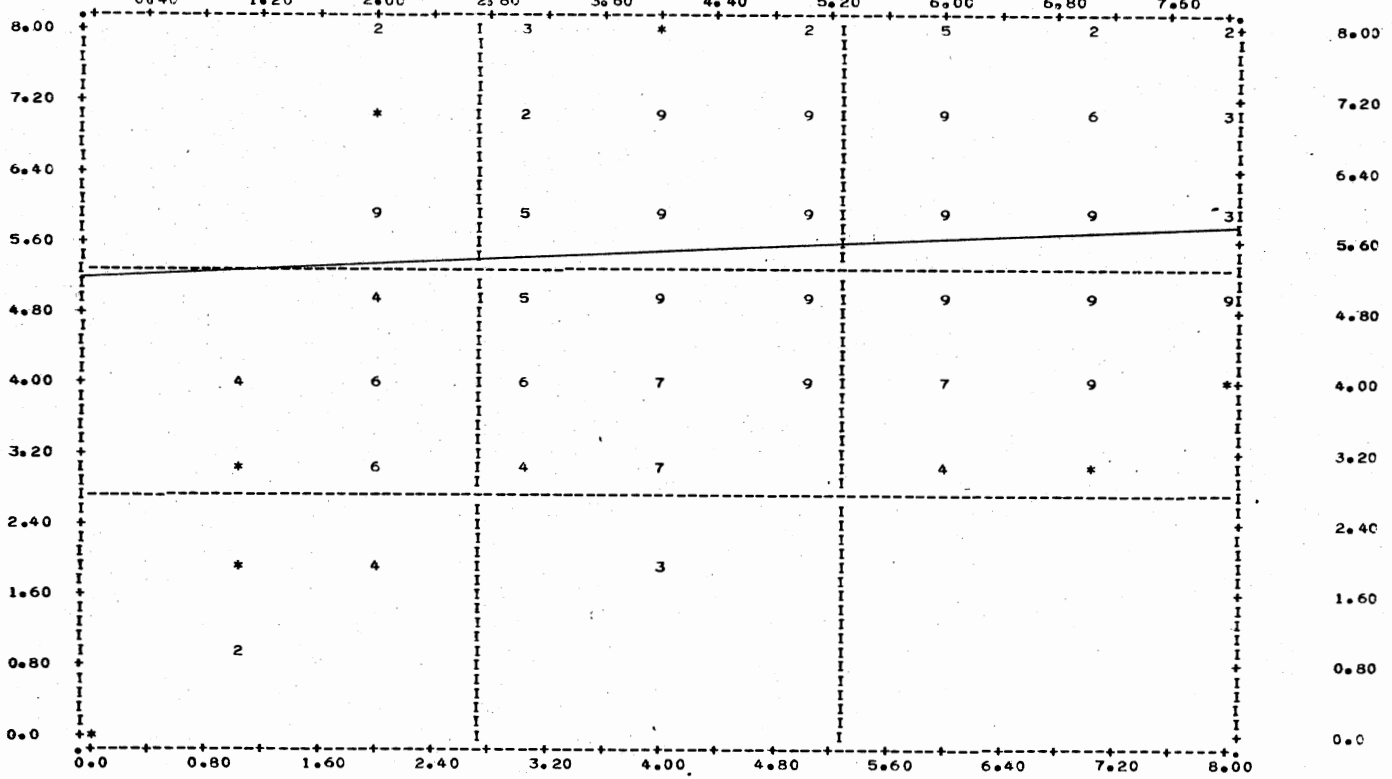
COMPARISON BY COLLEGE TYPE-ARTS AND SCIENCES 02/04/78 PAGE 7

STATISTICS..

CORRELATION (R)-	0.93546	R SQUARED -	0.87508	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.22614	INTERCEPT (A) -	0.77479	SLOPE (B) -	0.91462
PLOTTED VALUES -	370	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) FLEXIB FLEXIBILITY OCCURRENCES (ACROSS) FLESAT FLEXIBILITY SATISFACTION

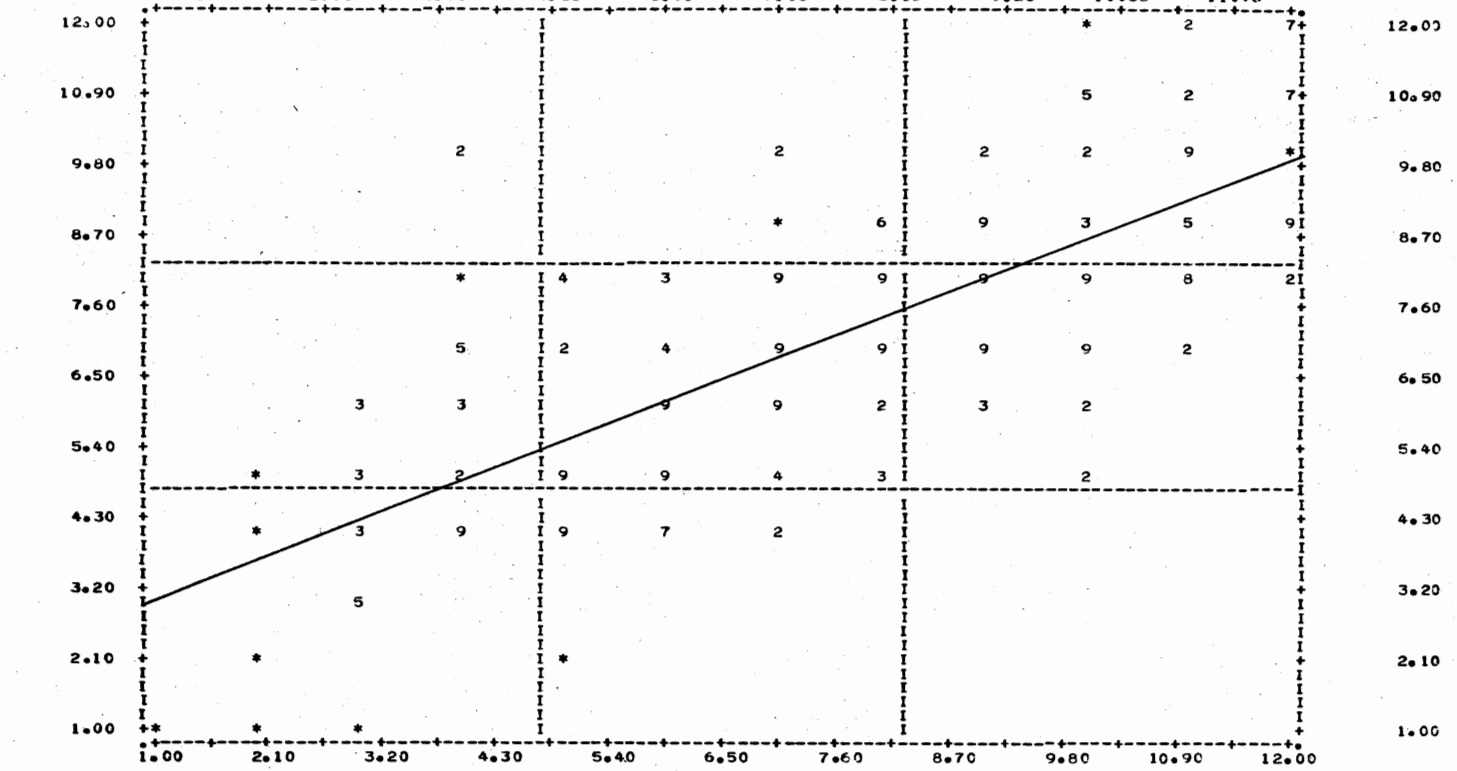


STATISTICS..

CORRELATION (R) -	0.22521	R SQUARED -	0.05072	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.37497	INTERCEPT (A) -	4.40543	SLOPE (B) -	0.17324
PLOTTED VALUES -	370	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) DIRECT DIRECTIONALITY OCCURRENCES (ACROSS) DIRSAT DIRECTIONALITY SATISFACTION

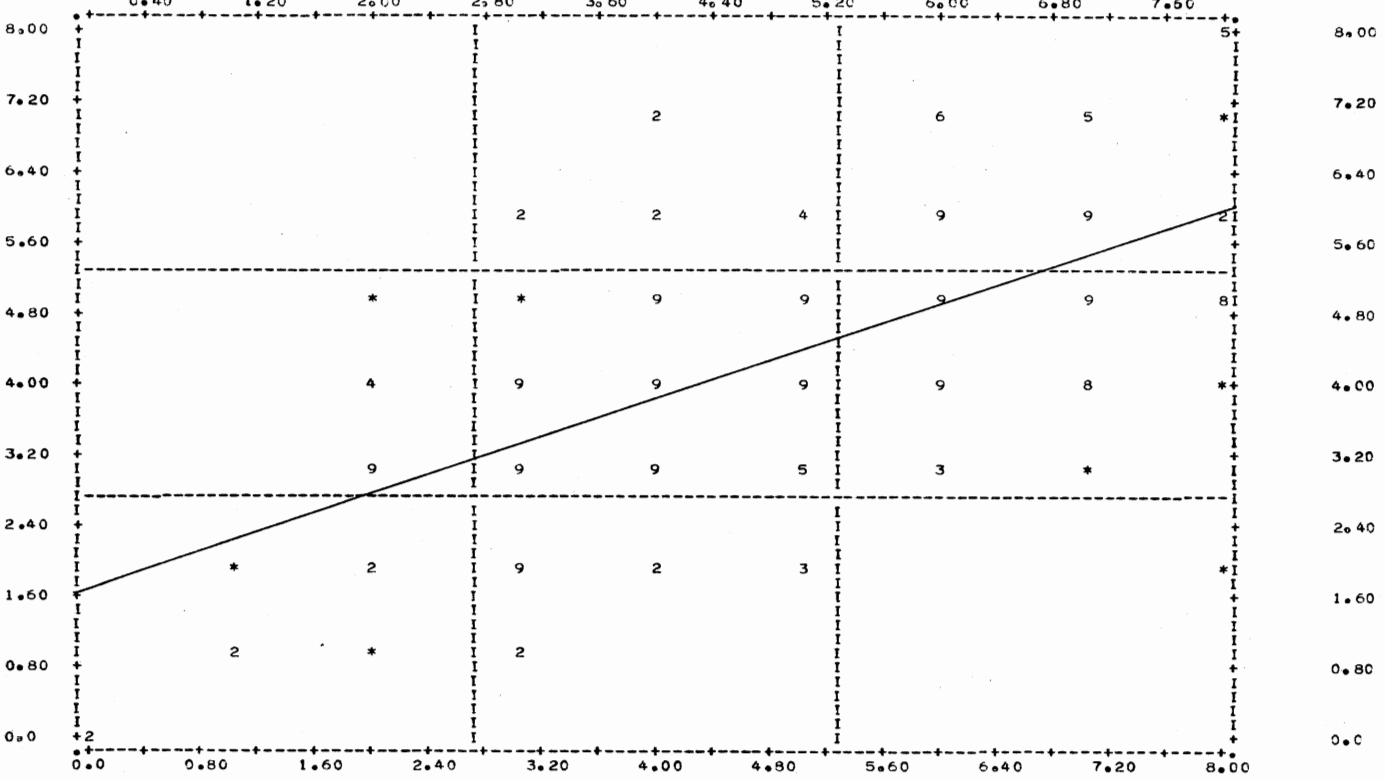


STATISTICS..

CORRELATION (R)-	0.77188	R SQUARED -	0.59580	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.34089	INTERCEPT (A) -	2.21478	SLOPE (B) -	0.64377
PLOTTED VALUES -	370	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) INITIA INITIATION OCCURRENCES (ACROSS) INITST INITIATION SATISFACTION



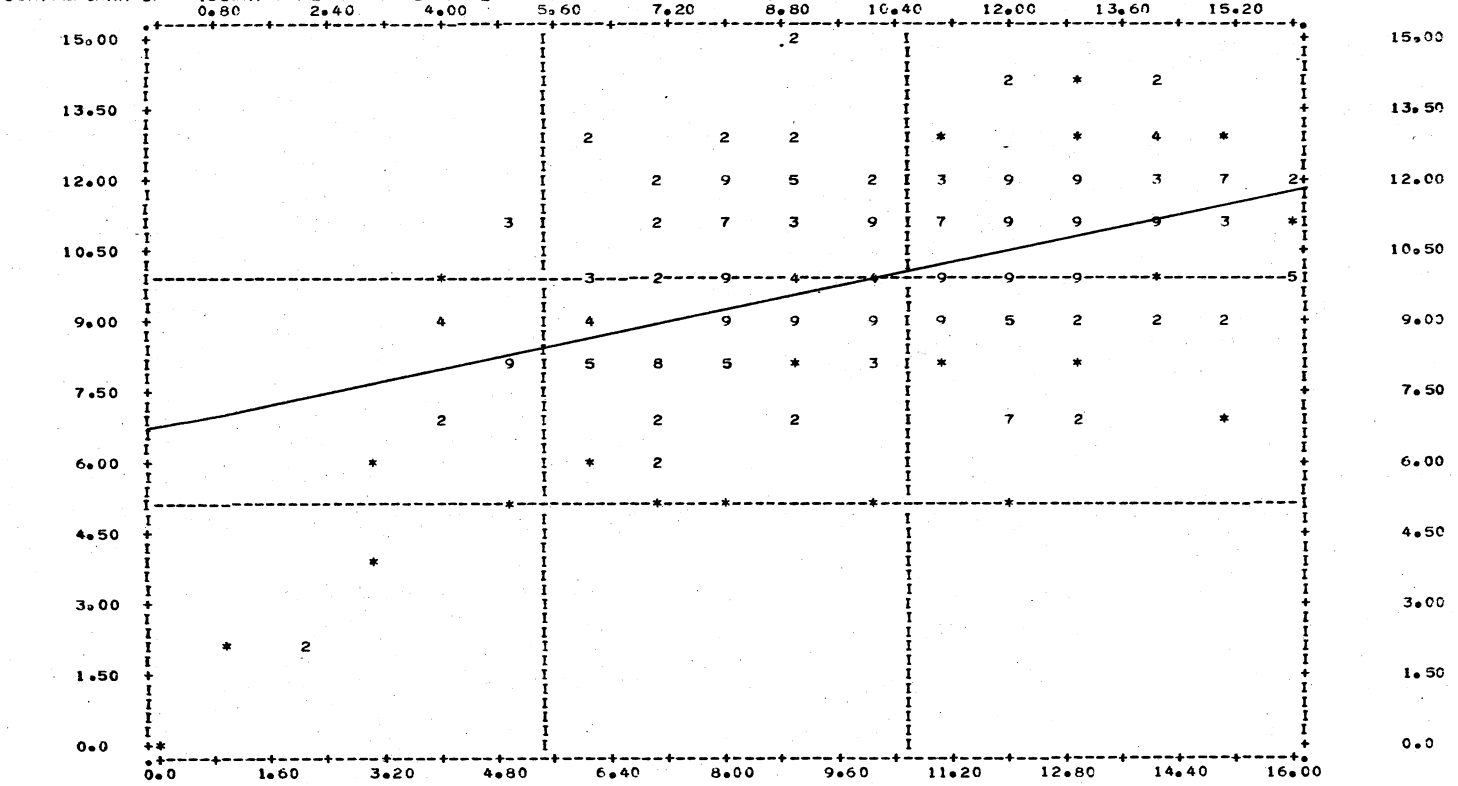
STATISTICS..

CORRELATION (R)-	0.66337	R SQUARED -	0.44006	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.02488	INTERCEPT (A) -	1.62498	SLOPE (B) -	0.54908
PLOTTED VALUES -	370	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

COMPARISON BY COLLEGE TYPE-ARTS AND SCIENCES 02/04/78 PAGE 14

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) TYPE TYPE OF MESSAGES OCCURRENC (ACROSS) TYST TYPE OF MESSAGES - SATISFACTION



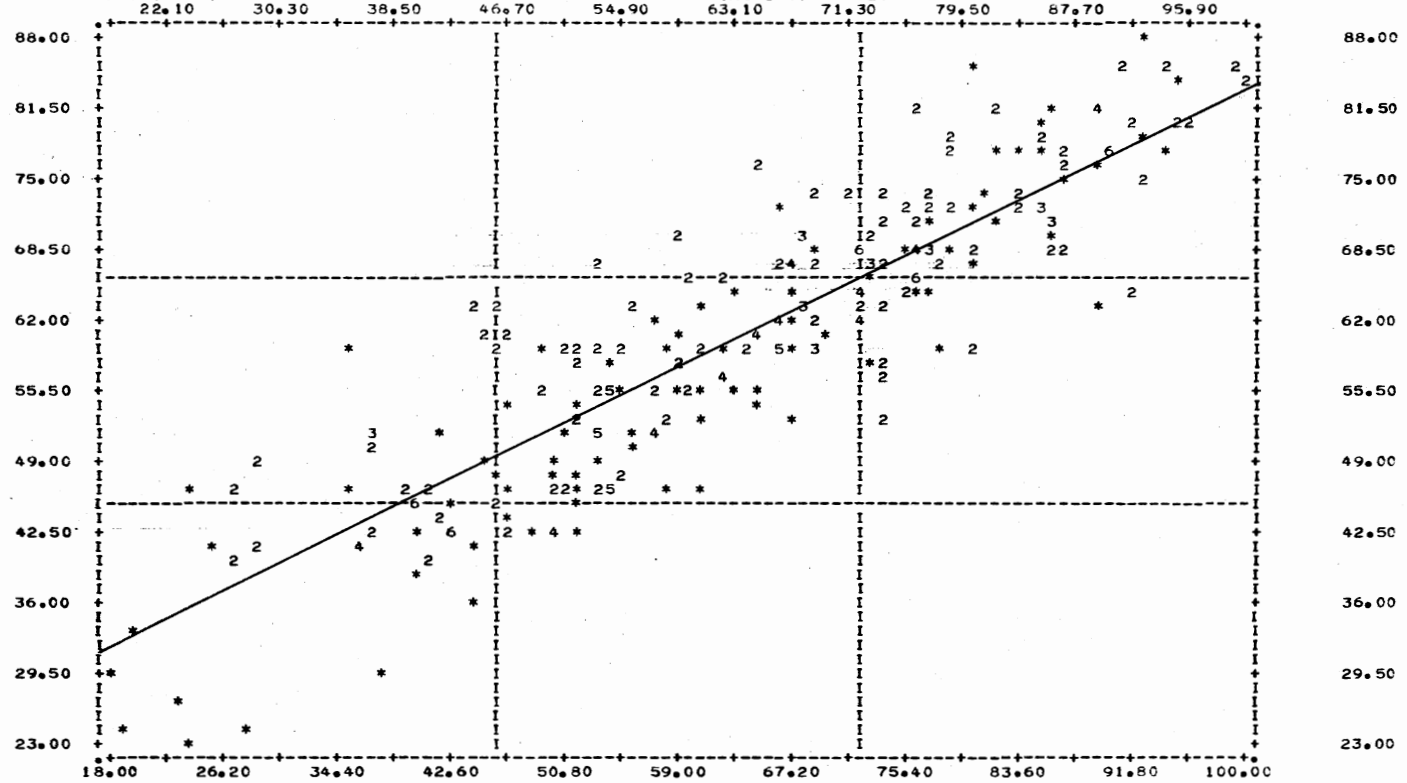
COMPARISON BY COLLEGE TYPE-ARTS AND SCIENCES 02/04/78 PAGE 15

STATISTICS..

CORRELATION (R)-	0.48494	R SQUARED -	0.23517	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.72500	INTERCEPT (A) -	6.71134	SLOPE (B) -	0.31741
PLOTTED VALUES -	370	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) OCCTOT (ACROSS) SATTOT



STATISTICS..

CORRELATION (R)-	0.88250	R SQUARED -	0.77881	SIGNIFICANCE -	0.00001
STD ERR OF EST -	6.03205	INTERCEPT (A) -	20.37159	SLOPE (B) -	0.63363
PLOTTED VALUES -	370	EXCLUDED VALUES-	0	MISSING VALUES -	0

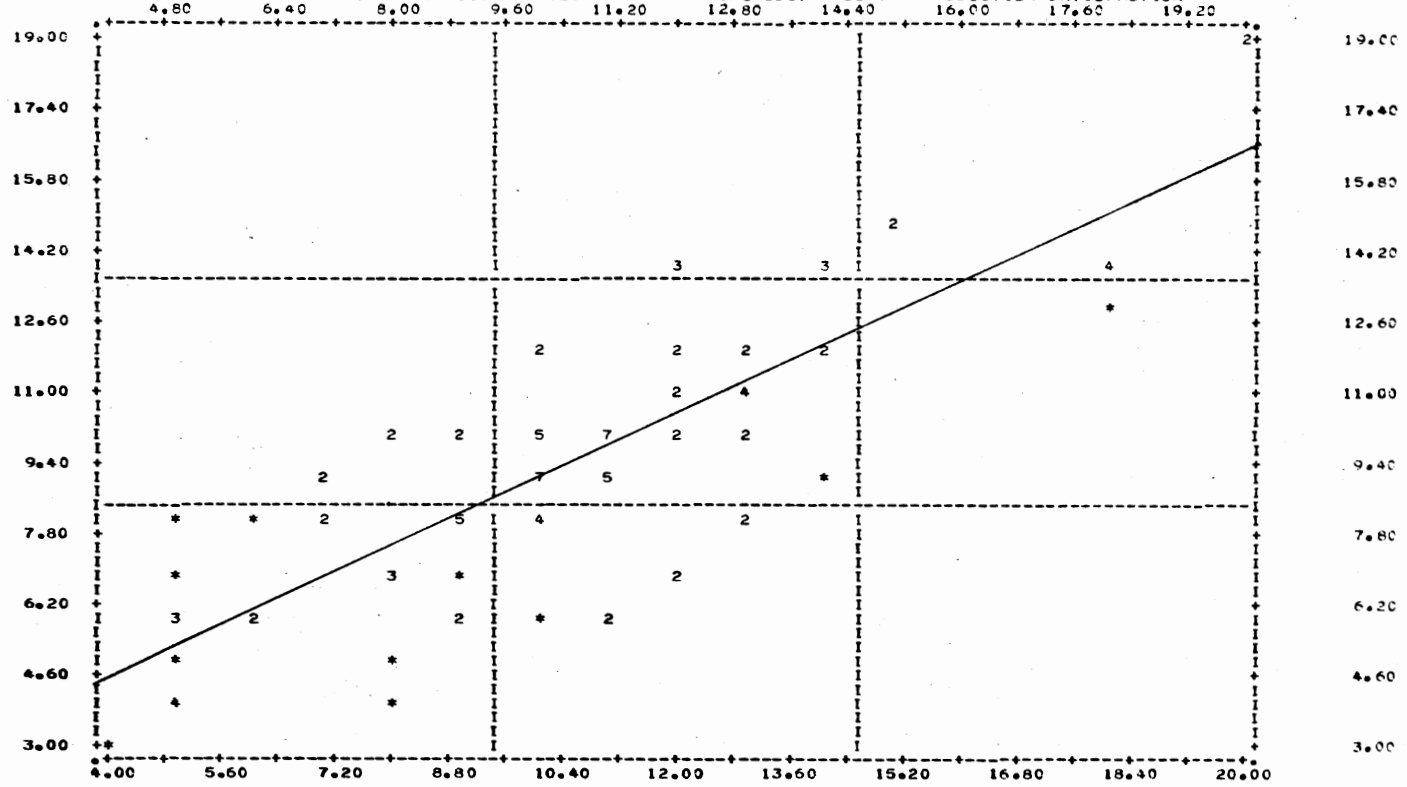
'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

APPENDIX E

SCATTERGRAMS OF THE RELATIONSHIP BETWEEN FACULTY SATISFACTION AND THE FORMALITY OF THE COMMUNICATION SYSTEM FOR COLLEGES OF BUSINESS

COMPARISON BY COLLEGE TYPE-BUSINESS 02/04/78 PAGE 2

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) PRODUC PRODUCTION OCCURRENCES (ACROSS) PROSAT PRODUCTION SATISFACTION



COMPARISON BY COLLEGE TYPE-BUSINESS 02/04/78 PAGE 3

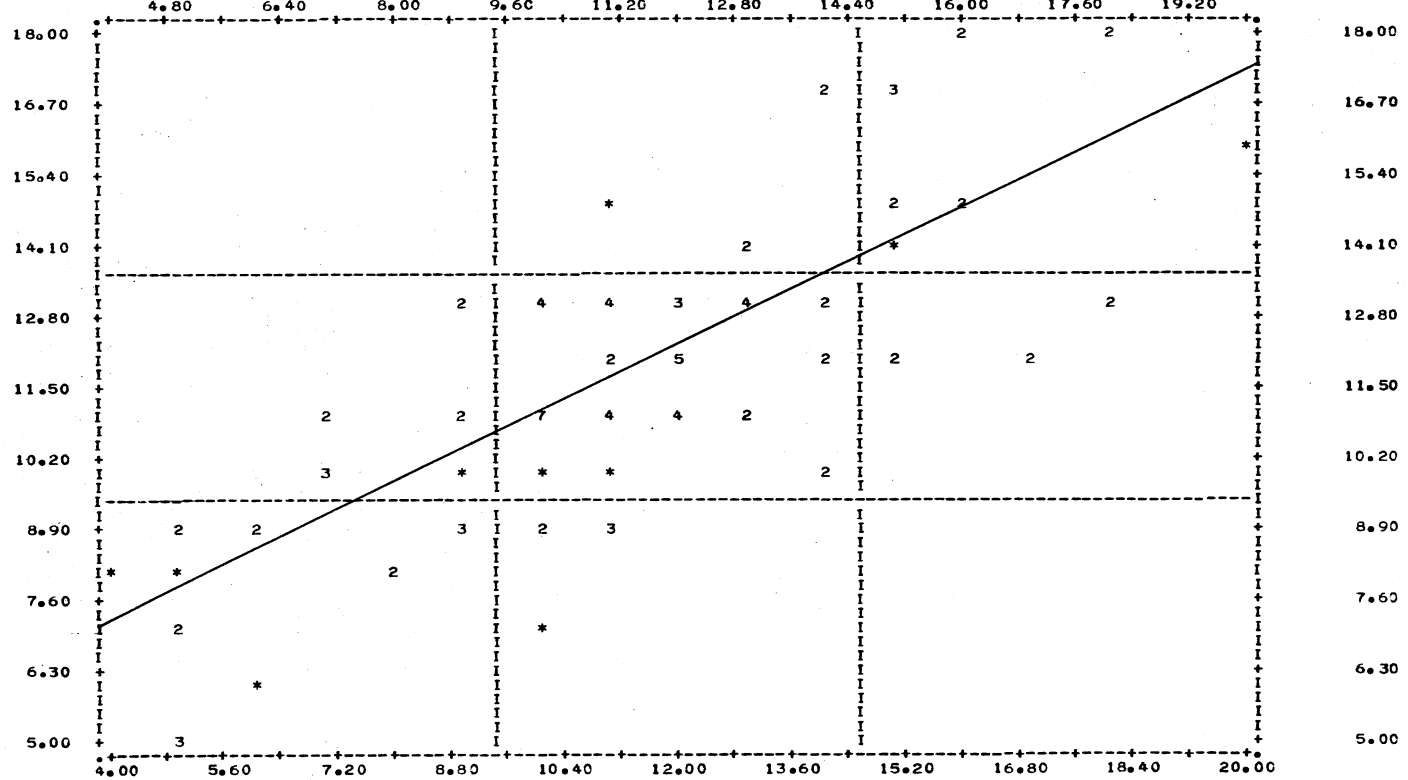
STATISTICS..

CORRELATION (R)-	0.82986	R SQUARED -	0.68867	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.71301	INTERCEPT (A) -	1.56854	SLOPE (B) -	0.74532
PLOTTED VALUES -	104	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

COMPARISON BY COLLEGE TYPE-BUSINESS 02/04/78 PAGE 4

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) MAINTN MAINTENANCE OCCURRENCES (ACROSS) MAINST MAINTENANCE SATISFACTION



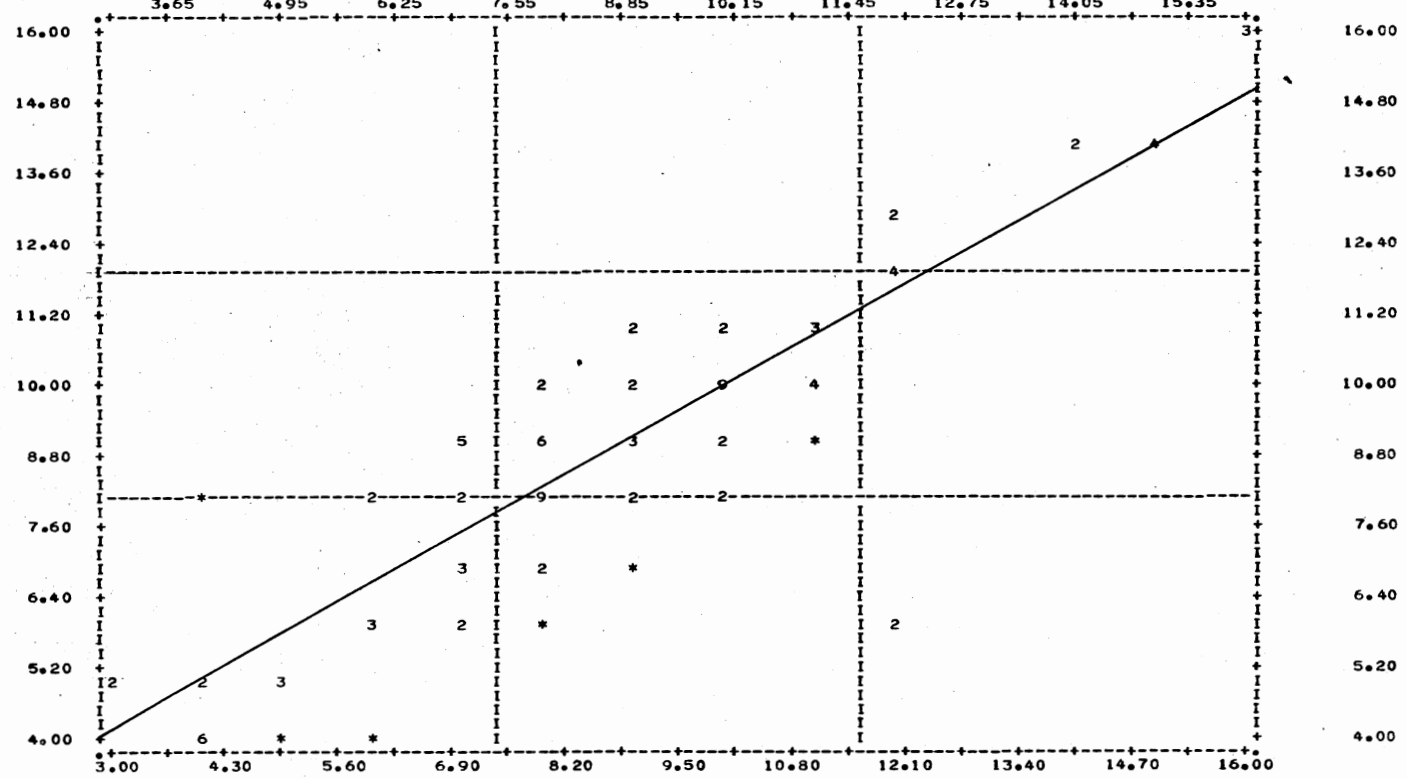
COMPARISON BY COLLEGE TYPE-BUSINESS 02/04/78 PAGE 5

STATISTICS..

CORRELATION (R)-	0.77400	R SQUARED -	0.59907	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.81007	INTERCEPT (A) -	4.52477	SLOPE (B) -	0.63370
PLOTTED VALUES -	104	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) INNOVT INNOVATION OCCURRENCES (ACROSS) INNSAT INNOVATION SATISFACTION

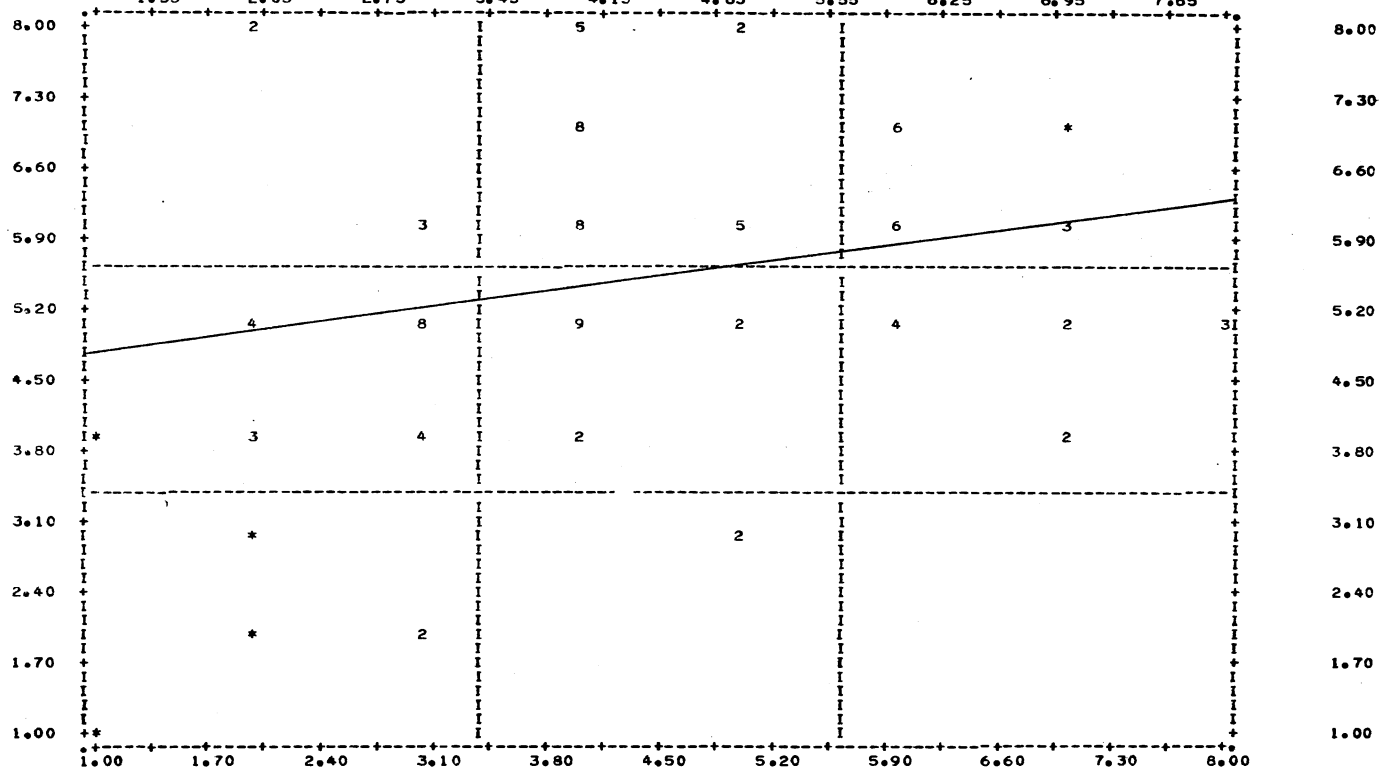


STATISTICS..

CORRELATION (R)-	0.89041	R SQUARED -	0.79283	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.30052	INTERCEPT (A) -	1.45508	SLOPE (B) -	0.83920
PLOTTED VALUES -	104	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) FLEXIB FLEXIBILITY OCCURRENCES (ACROSS) FLESAT FLEXIBILITY SATISFACTION

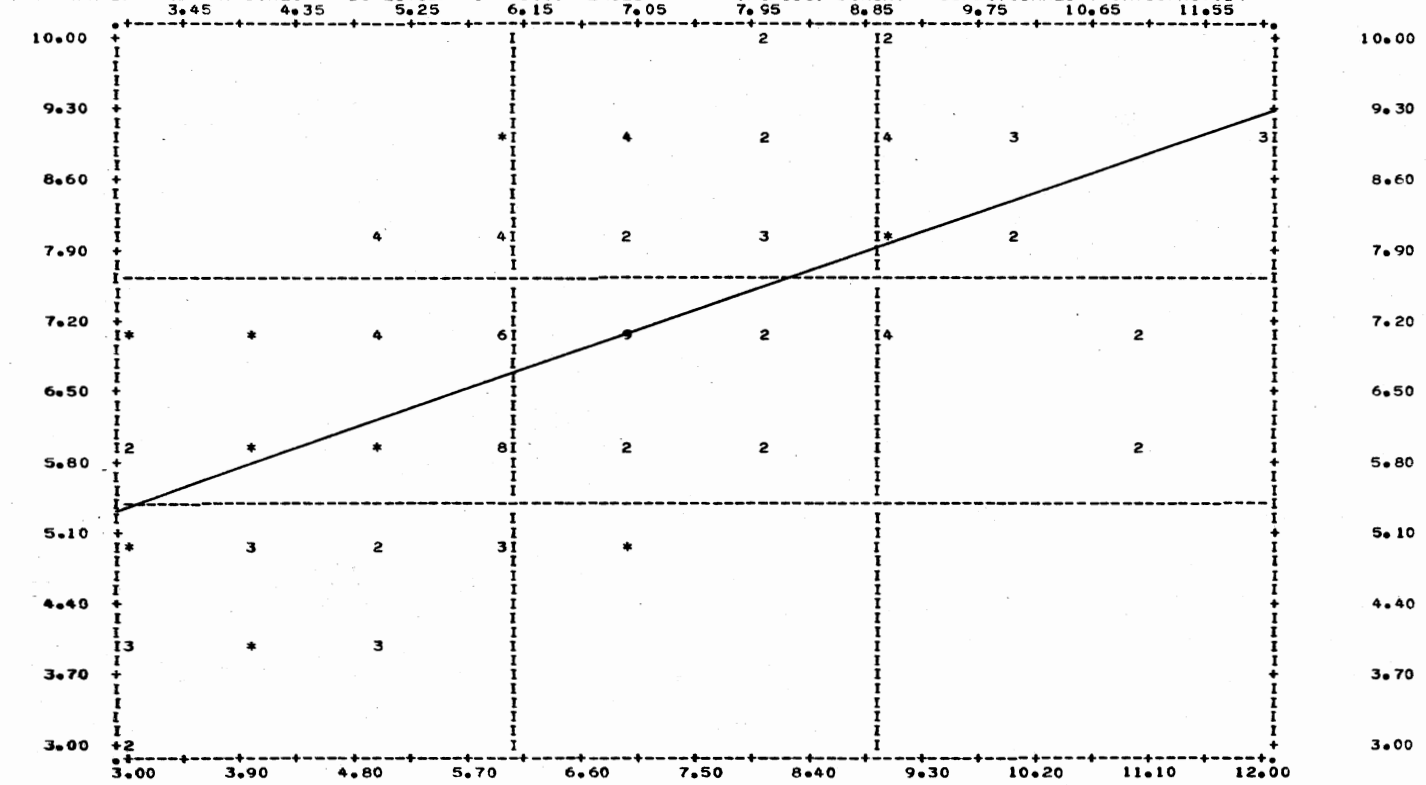


STATISTICS..

CORRELATION (R)-	0.26227	R SQUARED -	0.06879	SIGNIFICANCE -	0.00358
STD ERR OF EST -	1.37799	INTERCEPT (A) -	4.48098	SLOPE (B) -	0.23328
PLOTTED VALUES -	104	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) DIRECT DIRECTIONALITY OCCURRENCES (ACROSS) DIRSAT DIRECTIONALITY SATISFACTION



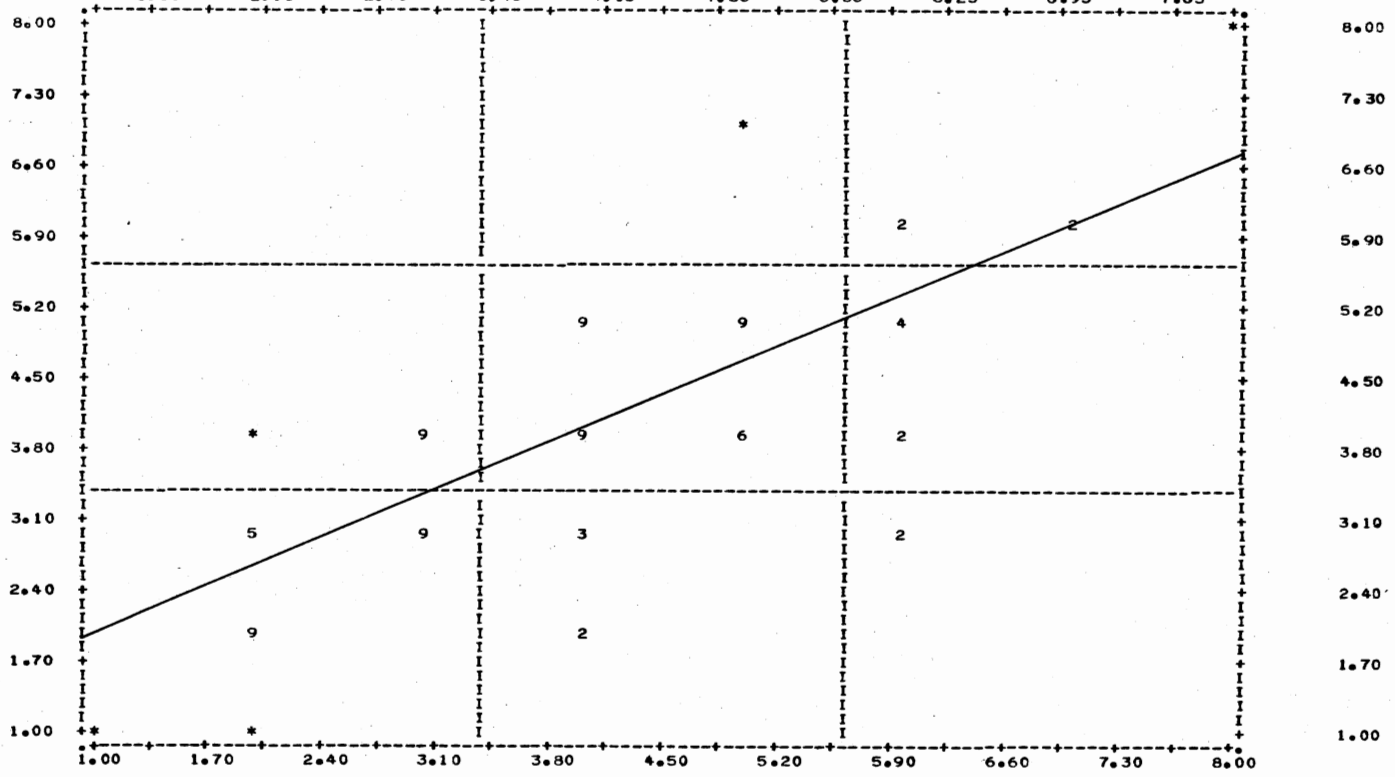
STATISTICS..

CORRELATION (R)-	0.61137	R SQUARED -	0.37378	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.29406	INTERCEPT (A) -	3.92666	SLOPE (B) -	0.44755
PLOTTED VALUES -	104	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

COMPARISON BY COLLEGE TYPE-BUSINESS 02/04/78 PAGE 12

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) INITIA INITIATION OCCURRENCES (ACROSS) INITST INITIATION SATISFACTION



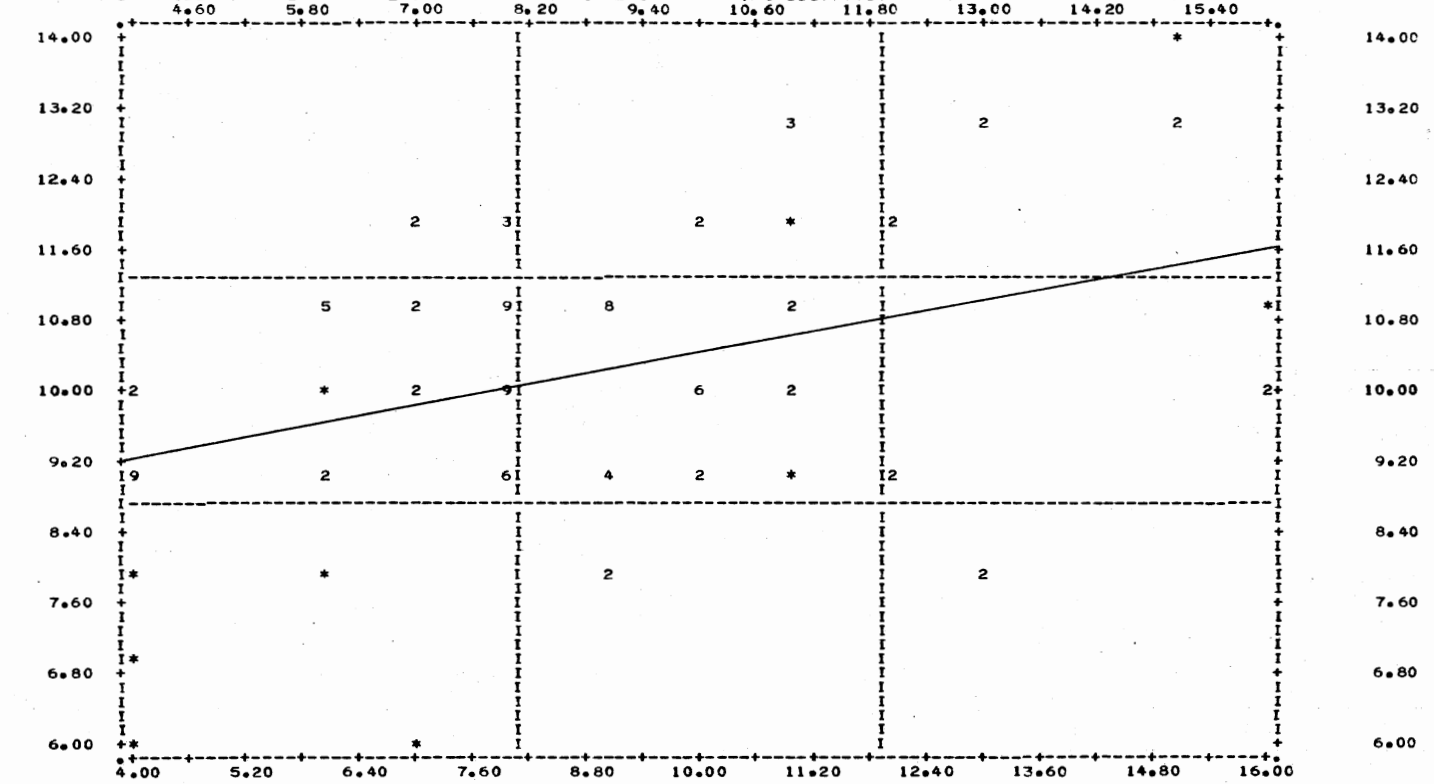
COMPARISON BY COLLEGE TYPE-BUSINESS 02/04/78 PAGE 13

STATISTICS..

CORRELATION (R)-	0.76338	R SQUARED -	0.58275	SIGNIFICANCE -	0.00001
STD ERR OF EST -	0.79625	INTERCEPT (A) -	1.23249	SLOPE (B) -	0.68947
PLOTTED VALUES -	104	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) TYPE TYPE OF MESSAGES OCCURRENC (ACROSS) TYST TYPE OF MESSAGES - SATISFACTION

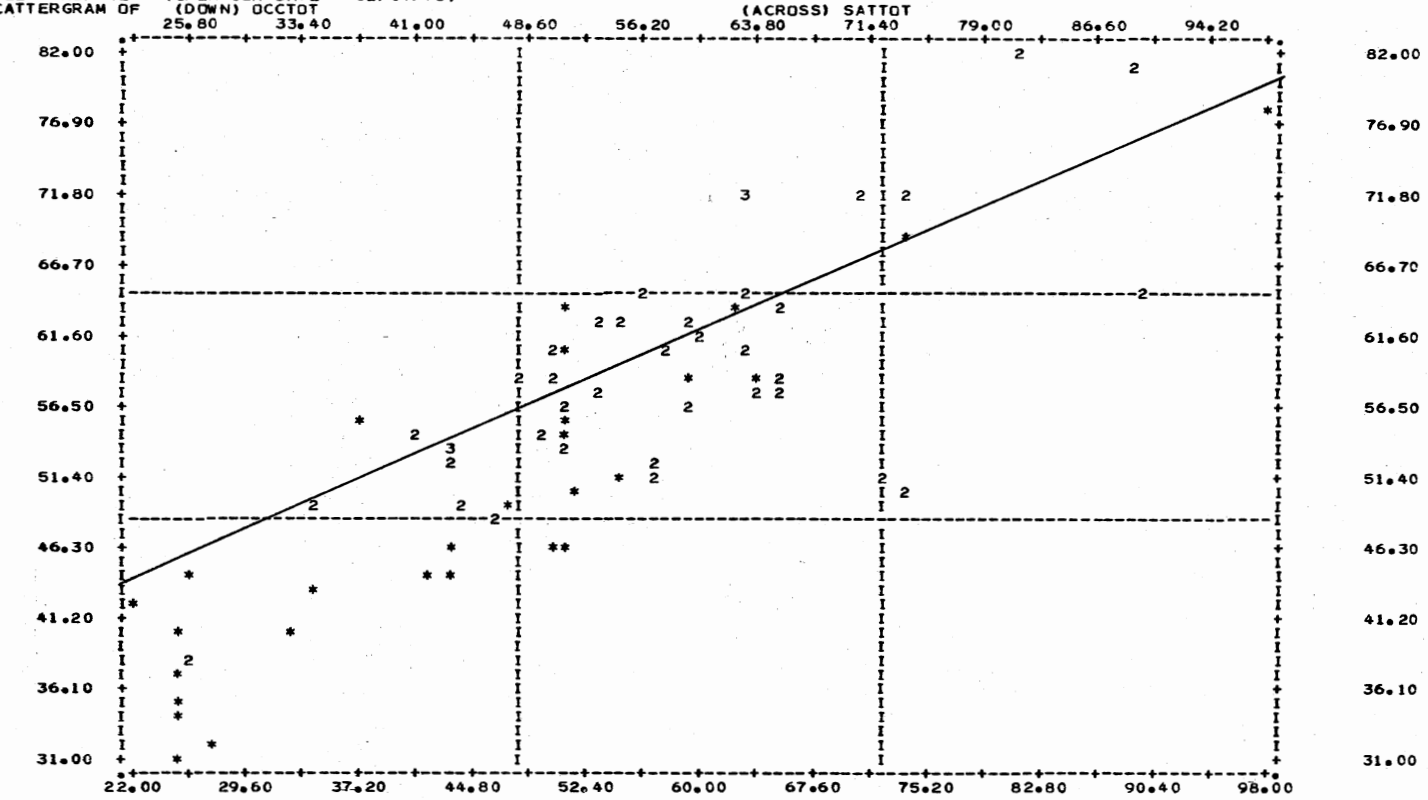


STATISTICS..

CORRELATION (R)-	0.42432	R SQUARED -	0.18004	SIGNIFICANCE -	0.00001
STD ERR OF EST -	1.36539	INTERCEPT (A) -	8.33922	SLOPE (B) -	0.21917
PLOTTED VALUES -	104	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

FILE NONAME (CREATION DATE = 02/04/78)
SCATTERGRAM OF (DOWN) OCCTOT (ACROSS) SATTOT



STATISTICS..

CORRELATION (R)-	0.81701	R SQUARED -	0.66751	SIGNIFICANCE -	0.00001
STD ERR OF EST -	6.22348	INTERCEPT (A) -	26.48723	SLOPE (B) -	0.55416
PLOTTED VALUES -	104	EXCLUDED VALUES-	0	MISSING VALUES -	0

'********' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.

VITA

Ronald Gilbert Area

Candidate for the Degree of

Doctor of Education

Thesis: ORGANIZATIONAL COMMUNICATION AND FACULTY SATISFACTION IN INSTITUTIONS OF HIGHER EDUCATION

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Professional Organizations: American Association for Higher Education, American Association of School Administrators, Association of School Business Officials, Phi Delta Kappa, Kappa Delta Pi, Lambda Chi Alpha.